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ECONOMIC REPORT
# of the GOVERNOR
1980

State of Michigan

WILLIAM G. MILLIKEN

Governor

Transmitted to the Michigan Legislature

March 1980

March, 1980

Ladies and Gentlemen of the Legislature:

It is my pleasure to submit for your consideration my 1980 *Economic Report,* the twelfth such report to be submitted by my office. Although the economy is currently experiencing difficulties, I am confident that the 1980s will be another period of prosperity and progress for Michigan.

During 1979, the Michigan economy began to exhibit considerable signs of weakness, after three consecutive years of strong economic growth. This weakness was particularly pronounced in the second half of the year as auto sales declined sharply, inflation continued unabated, and the Federal Reserve Board's restrictive monetary policies began to affect the economy, especially the housing sector.

Michigan personal income increased 9.7 percent in 1979, but actually declined 2.7 percent in real terms (adjusted for inflation). In 1978, by comparison, it increased 12.2 percent, a 4.3 percent increase in real terms. Overall, employment in Michigan increased only 1.9 percent, and manufacturing employment declined by 1.9 percent in 1979. The unemployment rate rose, from 7.5 percent in 1978 to an average of 7.8 percent in 1979. Automobile sales declined 6.2 percent to 10.6 million units, as rising gasoline prices, uncertain supplies, and the general weakness in the economy took their toll.

I expect the Michigan economy to remain weak in 1980, although I am optimistic that it will improve considerably in the second half of the year. The economy will be stimulated by an expected $30 billion federal tax cut, moderating inflation, lower interest rates and an easier monetary policy, and a strong increase in automobile sales in late summer. This improvement will lay the groundwork for a strong economic advance in 1981.

More specifically, Michigan personal income is expected to increase 6.7 percent in 1980, and employment is forecast to decline 1.7 percent, or 65,000 jobs below the 1979 level. The unemployment rate is expected to average 10.5 percent in 1980, an unacceptably high level. Inflation, which remains our number one economic problem, will moderate slightly in 1980: The Detroit Consumer Price Index is forecast to increase 8.7 percent from the fourth quarter of 1979 to the fourth quarter of 1980, compared with a 14.4 percent increase during the same period in 1979. Automobiles and housing will be the weakest sectors of the economy in 1980. Automobile sales are forecast to fall 5.7 percent to 10 million units, and U.S. housing starts are forecast to decline 16.7 percent to 1.45 million units.

As we enter the 1980s, Michigan and the nation are facing a number of serious economic problems: inflation, energy cost and availability, slowing automobile sales, rising unemployment, insufficient capital investment, low productivity and strong foreign competition in many important sectors of the economy. We must develop solutions to these problems if our state and nation are to continue to grow and prosper. We are particularly concerned about these problems in Michigan, because our economy is a mature one and depends heavily on the manufacturing sector and the health of the national economy.

This vulnerability to national economic swings was particularly evident in the 1970s. The nation was plagued by two major recessions and the beginning of a third, high inflation, relatively high unemployment, and a sharp decline in the value of the dollar against major foreign currencies. Of major importance to Michigan is that, in the late 1960s, foreign imports composed about 11 to 12 percent of total automobile sales, whereas today the foreign share is about 22 percent.

Michigan achieved a moderate record of economic growth in the 1970s but failed to match the record of the 1960s. During the 1970s, Michigan's population increased only 4.9 percent, as out-migration exceeded in-migration by 295,000, due largely to the sharp slowdown in Michigan's economy in mid-decade. By contrast, Michigan's population increased 13.5 percent in the 1960s, because birth rates were higher and net migration totalled about 45,000. The age composition of the population shifted in favor of older age groups in the 1970s, and the "under 17" age group declined substantially as the 18-to-44 and over-65 age groups increased dramatically.

Michigan personal income increased 147 percent between 1969 and 1979, a much faster rate than achieved in the 1960s, but the large majority of the growth was due to inflation. Adjusted for inflation, Michigan personal income increased only 29.5 percent compared with a 60 percent increase from 1959 to 1969. During that same period, Michigan real per capita income increased 36.3 percent, whereas the increase was only 19.9 percent between 1969 and 1979.

Michigan wage and salary employment increased about 500,000 during the 1970s, about 100,000 less than in the 1960s. Manufacturing employment declined by 45,000 jobs, from 38.7 percent of total employment in 1969 to 32 percent in 1979. The major growth sectors of the Michigan economy were services, government, and wholesale and retail trade.

Despite the economic problems of the 1970s, we made substantial progress in Michigan to improve our business climate, develop a more equitable tax system, increase the efficiency of state government, and slow the growth in government taxation and spending while meeting the needs of our citizens.

A partial list of the major accomplishments of the 1970s would include:

- The expansion of the bonding capacity of the Michigan State Housing Development Authority.

- The development of a comprehensive transportation program.
- The enactment of the single business tax.
- Passage of the Downtown Development Authority Act.
- The granting of over $2 billion in tax relief, including the most generous state financed property tax relief program in the nation.
- Passage of the Industrial Facilities Act (P.A. 198), which provides an important tool to encourage job expansion in Michigan.
- Establishing the Budget and Economic Stabilization Fund.
- The appointment of the Michigan Efficiency Task Force, which led to savings in government spending of over $100 million.
- The repeal of the sales tax on food and drugs.
- The enactment of a home heating assistance program for senior citizens and low-income persons.
- Substantial increases in financial aid to urban areas.
- Adoption of the Farmland and Open Spaces Preservation Act.

We begin the 1980s with even more economic problems and uncertainties than we faced at the beginning of the last decade. Inflation is much higher, productivity and real economic growth are advancing at a slower pace, unemployment is higher, energy supplies are much more uncertain, and our faith in the ability of government economic policies to deal with these problems has been seriously eroded by the events of the 1970s.

Michigan government lacks the tools to deal with these major national economic problems, but we do have both the responsibility and the ability to provide solutions to specific problems that will face our economy in the 1980s and the years beyond.

We can and must reform our workers' compensation system to provide more adequate protection for our workers and a better climate for our businesses.

We can and must develop a transportation financing program that will respond to rapidly rising costs and allow us to maintain and improve our vitally important transportation network.

We can and must respond to taxpayers' concerns about rising property taxes. Our generous property tax relief program and the tax limitation amendment of 1978 have provided property tax relief, but we continue to over use this tax relative to other revenue sources. I hope to work closely with you to develop an equitable package that will alleviate this problem.

We can and must develop new proposals to improve the administration of the property tax. We have made some progress in recent years, but we cannot win the full confidence of those who pay these taxes until we do everything possible to ensure that the burden is distributed fairly.

We can and must develop better methods of financing our educational system if we are to maintain the high quality of education so important to our future.

We can and must continue to strive to diversify our economic base so that we are better insulated against economic downturns. Much of the diversification achieved in the last decade has resulted from an attrition of our manufacturing base rather than from positive policies designed to attract new industries. We must reverse these circumstances if we are to provide the job opportunities needed in the 1980s.

We can and must enact an assistance package that will allow the Chrysler Corporation to remain a major provider of jobs in this state.

We can and must provide the financial and technical assistance needed to stimulate the growth of small businesses in Michigan.

We can and must continue to live within our limited resources while providing for the needs of the most vulnerable members of our society.

We can make substantial progress in all these areas, but I will need your support and cooperation. I am hopeful that we can forge new partnerships for progress in Michigan, between both the Executive and the Legislature, and between government and the citizens we all serve.

In the past ten years, this state has made great strides toward realizing the full potential of our resources, although our economic progress was not as pronounced as it might have been. More importantly, our accomplishments have been in an environment that preserved—indeed enlarged—the traditional freedom of our economic system.

In today's prosperous economy our people have more freedom of choice—among jobs, consumer goods and services, types of investments, places to live, and ways to enjoy leisure time—than any people at any time in history.

It is true that we currently have many economic problems and are not as prosperious as we might be, but I am still optimistic about the future. If we build upon our accomplishments of the 1960s and 1970s we can continue to make substantial economic progress and ensure the continued prosperity and economic freedom of all our citizens.

I submit this *Economic Report* to you with the hope that it will provide the information needed to develop the sound economic policies that will allow Michigan to achieve its full economic potential.

William G. Milliken

William G. Milliken

LETTER OF TRANSMITTAL

March, 1980

The Honorable William G. Milliken
Governor of Michigan
State Capitol
Lansing, Michigan

Dear Governor Milliken:

It is with pleasure that I submit to you the 1980 *Economic Report*. This document highlights the key economic developments of the year and identifies new state laws of economic significance. As always, extensive data have been compiled here to aid in the understanding of our changing economy.

Published here is a detailed evaluation of the state economy during 1979, and the economic outlook for 1980. The recovery our economy has experienced since 1975 diminished in 1979 as real retail sales dropped 4.5 percent, consumer prices rose 12.7 percent, real personal income declined an estimated 2.7 percent, and auto sales fell 5.7 percent.

As we enter 1980, the economic indicators are not positive. The downward course of the economy is expected to continue through the second quarter before improving again. Despite the decline we are now experiencing, we have had many significant accomplishments during the 1970s. Much progress lies ahead as we move forward and respond to the challenges of the 1980s.

The analyses and forecasts presented in this *Report* are the responsibility of the Office of Revenue and Tax Analysis of the Department of Management and Budget.

Respectfully,

Gerald H. Miller, Director
Department of Management and Budget

PREFACE

A three-year progression of economic growth was broken in 1979, as real personal income in Michigan declined 2.7 percent, unemployment increased to 7.8 percent, and automobile sales dropped nearly 6 percent. The 1980 *Economic Report of the Governor* identifies the factors contributing to the 1979 economic slowdown and provides an outlook for the 1980 economy.

In brief, 1980 will be a year of weak economic growth, particularly in Michigan, as the 1979 slowdown deteriorates into a recession expected to last through the first half of the year. On the positive side, inflation should begin to slow, and the economy is expected to improve in the second half of the year. By 1981, the economy's performance will be better.

The detailed analyses of the Michigan economy and its major sectors provided in this *Report* summarize developments during 1979 and describe the outlook for 1980. These forecasts are based on the empirical evaluations and judgments of economists within the Department of Management and Budget and the views offered by others in government, business, and academe.

Detailed data are presented throughout the *Report* and the final appendix provides numerous statistical tables useful in analyzing the many segments of the state's economy. Many of the data series presented here are regularly updated in the *Michigan Economic Review and Outlook* available bi-monthly from the Office of Revenue and Tax Analysis.

We wish to thank those readers who responded to the questionnaire accompanying the 1979 *Economic Report*. Many of the excellent comments received contributed directly to improvements in this *Report*. Unfortunately, budget reductions have limited our ability to include additional data and analyses, but we are hopeful that future editions can be expanded as suggested.

Valuable contributions to this edition were made by the Department of Agricultural Economics and the Graduate School of Business Administration at Michigan State University, by the Michigan Departments of Commerce, Labor, Agriculture, Natural Resources, and Transportation, and by the Offices of the Budget and Intergovernmental Relations, Michigan Department of Management and Budget.

Robert J. Kleine, Director
Office of Revenue and Tax Analysis

March, 1980

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1980
ECONOMIC REPORT

SUMMARY OF 1979 ECONOMIC EVENTS

FIRST QUARTER

Iranian Oil Shut-off. The Iranian revolution resulted in a cessation of oil production that deprived the U.S. of about 900,000 barrels of oil daily, roughly 5 percent of the national need. Because output from other nations increased, however, the net loss to the U.S. was some 500,000 barrels a day.

OPEC Price Increase. Most OPEC nations moved to take advantage of the tighter oil supplies caused by the Iranian oil shut-off. The 13 members of OPEC agreed to raise the base price of oil to $14.54, effective April 1, 1979, some six months earlier than the October 1 date called for in the schedule adopted in December, 1978.

Three Mile Island. A major accident involving a nuclear power plant reactor at Three Mile Island, Pennsylvania, released radioactive gases into the air and threatened the future of nuclear power in the U.S. It also called into question the safety systems used by the nuclear power industry and their regulation by the Nuclear Regulatory Commission.

SECOND QUARTER

Teamster Strike-Lockout. Following a 10-day strike and lockout, union and management negotiators reached agreement on a new trucking industry contract on April 10. The work stoppage temporarily crippled the automobile industry, whose operation relies on daily shipments by truck. Settlement was reached after a last-minute concession by the Carter Administration that relaxed wage guidelines.

Savings Outflow. Mutual savings banks in the nation had a record savings outflow of $1.5 billion in April, as thrift institutions were struck by disintermediation, the process by which consumers bypass or take funds out of savings accounts to invest them directly in market securities.

Domestic Oil Price Decontrol. The President began a phased removal of price controls from U.S. produced oil in preparation for complete decontrol in 1981.

Gasoline Shortage. With the exception of a few isolated regions, most of the nation was acutely affected by the gasoline shortage. As long lines waited at gasoline stations on the East Coast and elsewhere, several states followed California's lead and restricted gasoline sales to odd or even days of the week.

OPEC Price Increase. OPEC again agreed to raise the price of oil to a minimum of $18 per barrel. By June, spot market prices had reached $40 per barrel.

Chrysler Deficit. Chrysler Corporation, the nation's third largest auto maker, lost $207.1 million in the second quarter of 1979 and requested $1 billion in advance tax credits from the federal government.

THIRD QUARTER

Wage and Price Guidelines. President Carter's wage and price program was upheld by the U.S. Supreme Court, which refused to hear an appeal of a lower court ruling affirming the President's right to withhold federal contracts from companies violating anti-inflation wage guidelines.

Federal Reserve Board. Paul A. Volcker, president of the New York Federal Reserve Bank, was named Chairman of the Federal Reserve Board. The Volcker nomination, to succeed G. William Miller, was seen as a reaffirmation of conservative economic policies aimed at fighting inflation and stabilizing the dollar.

UAW Contract. The UAW and General Motors agreed on a new three-year contract in negotiations that concluded without a strike for the first time since 1964.

FOURTH QUARTER

Monetary Policy. On October 6, 1979, the Federal Reserve Board set strict credit policies designed to curb speculative excesses in financial, foreign exchange, and commodity markets and thereby to dampen inflation. This action marked a significant shift away from manipulation of the key interest rates to direct control of bank reserves as the tool to influence the growth of the nation's monetary base. The discount rate was raised to a record 12 percent, and a new reserve requirement of 8 percent was established for certain liabilities held by the Fed's member banks. These actions were taken to reduce the supply of money available for credit.

Chrysler Losses. Chrysler Corporation reported a loss of $460.4 million for the third quarter, the highest one-quarter loss ever recorded by a U.S. corporation. It increased the corporation's 1979 net loss to $721.5 million.

UAW Concessions. Chrysler and the UAW agreed on a three-year contract that will save the automaker $203 million in labor costs over two years. In addition, Chrysler agreed to nominate UAW president Douglas A. Fraser to its board of directors, and his election made him the first union official to become a board member of a U.S. auto company.

Iranian Oil. The U.S. retaliated against the continued detention of American hostages at its beseiged embassy in Teheran by suspending oil imports from Iran and freezing all Iranian government assets in the United States.

OPEC Indecision. OPEC members failed to agree on a common price for oil at their December meeting, and some members of the cartel announced steep increases.

Gold Prices. The price of gold soared above $500 an ounce on December 26, 1979, just two months after topping $400 and only five months after passing $300. Crossing such psychologically important boundaries used to take years, not months. Although the metal has been traded for centuries, its price reached $100 an ounce only in 1973, and another five years elapsed before it reached $200 an ounce.

Wage and Price Guideline Failure. President Carter's wage and price guidelines program failed to reduce the 1979 inflation rate below the 1978 level of 7.7 percent. The 1979 inflation rate of 11.3 percent was the highest since the years immediately following World War II. Administration officials believe they erred in heeding businessmen's advice to make the original voluntary standard flexible on prices and strict on wages; and union wage settlements in excess of the guidelines further eroded their impact.

"Missing Recession." Economists were nearly unanimous in thinking a recession had started in the second quarter of 1979 when the nation's GNP declined by 2.4 percent at an annual rate. When it recovered, at a 3.5 percent rate in the third quarter, forecasters were surprised. "It's the case of the missing recession," quipped Charles L. Schultze, Chairman of the President's Council of Economic Advisers. "It's out there somewhere, but nobody can find it."

Auto Layoffs. In a replay of the start of the 1974-75 recession, layoffs by the Big Three automakers soared to 110,000 out of a work force of 780,000, as the year drew to a close.

Chrysler Assistance. In its last action before Christmas, Congress approved $1.5 billion in loan guarantees on the condition that Chrysler raise $1.4 billion from workers, dealers, suppliers, states, cities, and creditors. The bill also required Chrysler's UAW members to make $462.5 million in contract concessions. The UAW had already provided concessions worth $203 million in an October contract that, for the first time, broke traditional wage parity among the Big Three.

SUMMARY OF 1980 ECONOMIC FORECAST

The economic forecast for 1980 is bleak. The economy is expected to enter a recession in the first two quarters, and real GNP will decline 1.3 percent during the year. Continued high inflation will erode real personal income. Even though consumers will dip into their savings in an effort to maintain their standard of living, the drop in personal income will restrict their ability to spend.

Nevertheless, this recession is not expected to be as severe as the 1974-75 recession. Better management of business inventories, less overbuilding in the housing industry, and a better outlook for exports and capital investment will moderate the decline. For a comparison of the 1980 recession with the 1974-75 recession, see Table 1.

TABLE 1
Selected U.S. and Michigan Economic Indicators:
A Comparison with Previous Recession (Percentage Change)

Indicator	1974	1975	1979	1980 Forecast
United States				
Real GNP	-1.4	-1.3	2.3	-1.3
Motor Vehicle Production	-20.6	-10.8	-11.0	-6.7
Housing Starts	-34.6	-13.3	-13.4	-16.7
Savings Rate[1]	7.3	7.7	4.5	4.1
Michigan				
Real Personal Income	-3.5	-1.8	-2.7[2]	-4.1
Total Employment	0.3	-5.0	1.9	-1.8
Unemployment Rate[1]	7.4	12.5	7.8	10.5
Detroit CPI	10.9	7.5	12.7	11.3

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1. Actual rate, not percent change.
2. Estimate.

The recession will cause Michigan unemployment to jump 34.6 percent, so that 10.5 percent of the labor force will be without jobs. High unemployment combined with an inflation rate of 11.3 percent will result in a drop of 4.1 percent in real Michigan personal income in 1980. For a summary of the impact of the recession on the U.S. and Michigan economies, see Table 2.

TABLE 2
Economic Forecast Summary

	1979	1980 Forecast	Percent Change
United States			
U.S. Real GNP (Billions of 1972 Dollars)	$ 1,429.10	$1,411.10	-1.3
Motor Vehicle Production (Millions)	11.47	10.70	-6.7
Housing Starts (Millions)	1.74	1.45	-16.7
Savings Rate (Percent)	4.90	4.10	-16.3
World Crude Oil Price (Per Barrel)	$ 20.00	$ 30.00	50.0
Michigan			
Real Personal Income (Billions of 1967 Dollars)	$ 39.07[1]	$ 37.46	-4.1
Michigan Motor Vehicle Production (Millions)	3.56	3.32	-6.7
Total Employment (Thousands)	3,989.20	3,917.00	-1.8
Unemployment Rate (Percent)	7.80	10.50	34.6
Detroit CPI (1967 = 100)	218.80	243.50	11.3

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1. Estimate.

SUMMARY OF NATIONAL ECONOMIC POLICY

1979 Developments

In 1979, U.S. economic activity slowed as a result of a severe winter, the Teamster strike-lockout, an energy crisis, and an increase in the rate of inflation. While the economy did post a modest 2.3 percent average annual gain in the real gross national product, its growth from the fourth quarter of 1978 to the fourth quarter of 1979 was only 0.8 percent. Inflation, as measured by the U.S. Consumer Price Index (CPI), increased an average of 11.3 percent for the year, but at an annual rate of nearly 13 percent during the fourth quarter, as world oil prices rose nearly 50 percent on the average and housing prices and mortgage costs increased.

Although several key measures of economic performance peaked in the first half of 1979, the economy declined only moderately as consumers dipped further into their savings to offset inflation. By December, the savings rate had declined to 2.6 percent from the average of nearly 5 percent in 1978. Increased consumer spending, generated by the lower level of saving, was one of the primary reasons for the growth in real GNP that did occur in 1979. In addition, growth in exports, especially aircraft, machinery, and agricultural goods, buoyed the economy's performance.

In a major policy decision, the Federal Reserve Board (Fed) enacted a new program in October, 1979, in an effort to control inflation and support the dollar overseas by curbing monetary growth. Federal taxation and spending policies were mildly restrictive, and efforts to balance the federal budget reduced the deficit to an estimated $12 billion for 1979.

1980 Outlook

In 1980, U.S. economic activity is expected to continue to slow, as average annual real GNP declines by 1.4 percent. Even as the slowing world economy and price induced conservation moderate world crude oil prices in 1980, the lifting of controls over domestic oil will cause U.S. energy prices to continue to rise at their current pace. As housing starts decline to an average level of 1.45 million units, home prices will temporarily decline and mortgage rates will also decrease, but at a very slow pace. Although inflation will abate briefly, the lack of productivity growth and continued increases in unit labor costs portend additional pressures on prices in the coming year.

In general, the 1980 rate of inflation is forecast to be 11 percent, only slightly below the 1979 rate. The savings rate is expected to average about 4 percent as individuals become concerned about debt repayment and employment security. The high rates of inflation will curtail spending, which will decline from its 1979 level. Unemployment is foreseen to increase to an average annual rate of 7.4 percent.

Both monetary and fiscal policy are expected to remain restrictive for most of 1980. As the unemployment rate reaches the 7 percent range and the economy exhibits a substantial decline, however, both will moderate, but only if a major fiscal stimulus package is adopted. Providing an estimated $30 billion in tax relief for consumers and business, the tax cut will do little to offset the recession in 1980, but it should be a significant aid to recovery in 1981.

THE MICHIGAN ECONOMY

- Employment and Unemployment
- Personal Income
- Prices
- Consumer Spending
- Population
- State and Regional Comparisons

EMPLOYMENT AND UNEMPLOYMENT

1979 Developments

The Michigan economy began the 1979 year vigorously but later faltered as a direct result of the Teamster strike-lockout and Iranian oil cutback. Both events contributed to a significant decrease in motor vehicle production over the remainder of the year. Employment growth reflected this trend as the average annual increase was 76,200 persons, or a 1.9 percent increase to about 4 million persons, compared with the 1978 increase of 3.4 percent. By contrast, the Michigan labor force* grew 2.9 percent in 1979, to 4.3 million persons, an increase from the 1978 growth rate of 1.9 percent. As a result of the slowdown in economic activity and the increase in the labor force, the Michigan unemployment rate increased in 1979 to an annual average of 7.8 percent from 6.9 percent the previous year. In other words, 47,000 more workers were unemployed in 1979 than in 1978.

Both the labor force and employment increased slightly less in the Detroit Standard Metropolitan Statistical Area (SMSA) than in the remainder of the state in 1979; however, the unemployment rates for the Detroit SMSA and the remainder of the state both stood at 7.8 percent. (See Table 3.)

Nevertheless, the unemployment rate varied considerably across the state. For example, in Kalamazoo and the Upper Peninsula, the unemployment rate did not change from the previous year's level, but in other areas it increased substantially. In Flint, which had the largest increase, the unemployment rate went up a full percentage point to 8.6 percent (see Table 4). In 1978, the unemployment rates for each of these areas declined.

The significant economic slowdown that unfolded during 1979 can be vividly illustrated by a comparison of semi-annual unemployment rates. During the first half of 1979, the number of unemployed persons increased by 13.7 percent, and those claiming unemployment benefits rose by 6.7 percent. At this time, as in the second half of 1978, no one received extended benefits under the 1975 federal extended benefits program. In the second half of 1979, however, 14.3 percent of the claimants were receiving extended benefits as the labor market worsened. The average number claiming benefits in the second half of 1979 increased by 65 percent over the same period in 1978 and, the percent of unemployed claiming benefits increased from 39 percent in 1978 to 54.2 percent in 1979.

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*The labor force is defined as the sum of the number of workers employed plus the number classified as unemployed.

TABLE 3
Detroit SMSA and Balance of State Employment, 1977-1979

(Thousands)

Year	Labor Force	Employment	Unemployment	Unemployment Rate
1977				
Detroit SMSA	1,966.6	1,811.7	154.9	7.9
All Others	2,157.4	1,974.3	182.1	8.4
Michigan	4,124.0	3,786.0	337.0	8.2
1978				
Detroit SMSA	2,003.4	1,871.2	132.2	6.6
All Others	2,198.6	2,041.8	156.8	7.1
Michigan	4,202.0	3,913.0	289.0	6.9
1979				
Detroit SMSA	2,056.6	1,895.5	161.1	7.8
All Others	2,268.4	2,093.7	174.8	7.8
Michigan	4,325.0	3,989.2	335.9	7.8

Source: Michigan Employment Security Commission

TABLE 4
Selected Michigan SMSA Unemployment Rates, 1977-79

(Percent)

	1977	1978	1979
Ann Arbor	6.5	5.4	5.7
Battle Creek	8.4	6.6	6.7
Flint	8.6	7.6	8.6
Grand Rapids	6.3	5.0	5.5
Kalamazoo	6.2	5.4	5.4
Lansing - East Lansing	7.7	6.3	6.7
Upper Peninsula	11.6	10.6	10.6

Source: Michigan Employment Security Commission

TABLE 5
Michigan Unemployed and Unemployment Beneficiaries, 1977-1979

(Thousands)

Period	Average Number Unemployed	Average Claiming U.I. Benefits		Beneficiaries of Federal program Average Claiming U.I. Benefits	
		Number	Percent	Number	Percent
1977					
Jan.-June	351.0	254.6	72.5	53.0	15.1
July-Dec.	324.3	173.9	53.6	25.0	7.7
1978					
Jan.-June	297.3	138.3	46.5	0.9	0.3
July-Dec.	281.3	109.6	39.0	0.0	0.0
1979					
Jan.-June	338.0	147.0	43.5	0.0	0.0
July-Dec.	333.8	180.8	54.2	47.8	14.3

Source: Michigan Employment Security Commission

Wage and Salary Employment

The average annual growth in wage and salary employment was considerably slower than that of total employment in 1979. While total employment grew by 1.9 percent, wage and salary employment increased only 0.7 percent and averaged 3.6 million persons in 1979. In 1978, wage and salary employment grew at nearly a 4 percent rate. The slower growth in wage and salary employment resulted from the cutbacks in motor vehicle production that, in turn, caused the slowing of and eventual decline in employment in the manufacturing sector.

Manufacturing Employment

The decline in average annual employment in the manufacturing sector was widespread in 1979. (See Table 6.) Total manufacturing employment declined by 1.9 percent, a decrease of 21,700 workers. The durable goods sector accounted for nearly 90 percent of this loss as it declined by 2.1 percent to 908,400. Employment in non durable goods manufacturing fell 1.2 percent, a loss of 2,600 persons, for an annual average of 223,200 persons.

Within the durable goods sector, the largest percentage decline in employment was posted by other transportation equipment, which fell 6.4 percent. The largest employment loss was in the motor vehicles and equipment sector, which declined by 13,600 persons, on average, in 1979. Other sectors linked to motor vehicle production, such as primary metals and fabricated metals, also declined. The only durable goods manufacturing sectors in which employment grew in 1979 were furniture and fixtures and nonelectric machinery. Employment in each of these categories grew by approximately 4.5 percent.

Although nondurable manufacturing employment declined an average of 1.2 percent, the employment loss of 2,600 persons was concentrated in textiles and apparel, which fell by 8.3 percent, and in other nondurables, which were down by 5.3 percent. Partially offsetting these declines were modest gains in food and kindred products, paper, and printing and publishing.

The gravity of the 1979 decline in manufacturing employment is much more evident when year end comparisons are made. The over all decline in manufacturing employment from December 1978, to December 1979, was 8.7 percent for a net loss of 103,600 persons. The durable sector accounted for 84.8 percent of the decline measured in this way and visibly reflected the contraction in economic activity. The decline in motor vehicles and equipment manufacturing employment was 47,200 for this period, a decline of 11.6 percent. The only manufacturing sector to post a December to December gain was nonelectric machinery, which increased by 1.2 percent; all other sectors decreased.

Nonmanufacturing Employment

While employment in the nonmanufacturing industries continued to advance, the growth rate in 1979 was below that of the previous year. In 1979, nonmanufacturing employment increased by 2.5 percent compared with 4.7 percent in 1978. Because the nonmanufacturing sectors are generally less sensitive to cyclical forces in the economy, all but one sector added employees to their payrolls in 1979. Only the wholesale trade sector declined in absolute terms as it lost 7,100 persons, a 1.8 percent decline.

The decline in wholesale trade was more than offset by gains in other sectors. Services continued their strong growth, as employment increased 24,200 persons to 633,200 or 4 percent over the previous year. Similarly, employment in retail trade increased by 13,400 persons to 591,100 persons. Growth occurred in the remaining sectors as well, as shown in Table 7.

Growth in the nonmanufacturing industries was less robust when measured from December to December and illustrated how the economic slowdown spread through the economy. In this context, total nonmanufacturing employment grew only 1.4 percent. As high interest rates slowed construction activity, construction employment declined 4.1 percent over this period for a loss of 6,100 persons.

Government Employment

In 1979, government employment in the aggregate was unchanged from the previous year's level at 617,500 persons. Federal government employment in Michigan increased by 1.6 percent to 55,900 persons, and local government employment grew by 1.1 percent to 424,600. Offsetting this growth in federal and local employment was the 4 percent decline in Michigan state government employment. The annual average employment in state government declined to 137,100 persons. (See Table 8.)

1980 Outlook

The forecast for the Michigan labor force and employment assumes a continually slowing economy for three quarters of the year and a modest upturn at year's end. The total labor force is expected to grow at a rate of one percent over 1979, to 4.4 million persons. The slower rate of growth in the labor force is a direct function of the limited employment opportunities that discourage workers from remaining in the labor force. Given the economic environment, total employment is expected to decline to 3.9 million persons, an average loss of 72,200 over the year. The 1.8 percent decline in employment expected in 1980, coupled with the one percent growth expected in the labor force translates into an unemployment rate of 10.5 percent for the year. It is expected that the number of unemployed persons will average 458,000 in 1980, up 36.4 percent over 1979.

The average annual number of wage and salary employees is expected to decline 1.2 percent to 3.6 million. Continued weakness in motor vehicle manufacturing industries is expected to reduce employment further in the manufacturing sector by 6.9 percent to 1.05 million persons. More specifically, durable goods manufacturing employment is expected to decline by 7.6 percent to 839,000 persons, whereas nondurable goods manufacturing employment is expected to decline 4.1 percent to 214,000 persons.

The nonmanufacturing industries are expected to continue to grow, although at a slower pace than in 1979. In sum, employment in these industries is expected to increase by a modest 1.5 percent to 1.9 million persons. Services are expected to exhibit a better than average growth trend and increase 3.8 percent to 657,000 persons. The only industry in this classification expected to decline, on average, during 1980 is construction, which will continue to be plagued by financing problems for at least the first half of the year. As a result, construction employment is expected to decrease 1.6 percent to 141,000 persons.

Government employment is expected to increase modestly by 1.4 percent to 626,000 in 1980.

PERSONAL INCOME

1979 Developments

Economic activity in Michigan during 1979 generated an estimated $85.5 billion in personal income, an increase of 9.7 percent from the 1978 level of $77.9 billion. In contrast to the 12.2 percent increase in 1978, it was the lowest rate of growth in personal income since 1975, and a clear indication that the growth in economic activity diminished in 1979. Per capita income also reflected the soft economic growth in 1979. In 1978, per capita income grew 11.7 percent to $8,483, but in 1979 it increased only 9.5 percent, to $9,285.

In light of the extraordinary rate of inflation in 1979, the nominal personal income figures do not depict the true extent of the slowdown in personal income growth. In constant dollars, Michigan's personal income declined 2.7 percent in 1979, down sharply from the real increase of 5.8 percent in 1978. Per capita income also declined on a real basis in 1979, by 2.9 percent, after increasing 3.8 percent in 1978.

While Michigan's economy is well diversified, the importance of the automobile industry makes Michigan's economic performance more cyclical than the national economy, and 1979 provided an excellent example of this phenomenon. Between 1976 and 1978, the national economy enjoyed an unprecedented period of expansion, and during each of these years Michigan's personal income grew faster than total U.S. personal income. However, as economic activity began to weaken in 1979, the growth in Michigan's personal income fell below the national rate.

Wage and salary disbursements, which are the major component of personal income, totaled an estimated $57.3 billion in Michigan in 1979, compared with $52.6 billion in 1978. This growth rate, of 9 percent, is down from the 12.9 percent increase in 1978, and is another indication that economic growth did indeed diminish in 1979. Like personal income, wage and salary growth in 1979 was the slowest since 1975. Although the major reduction occurred in the manufacturing sector, wage and salary growth also fell slightly in the nonmanufacturing industries and in government.

Wages and salaries paid by manufacturing industries increased only 6.3 percent in 1979, down considerably from the strong 12.1 percent gain in 1978. This significant decline occurred mainly in the durable manufacturing industries, which are especially sensitive to the effects of inflation. In 1979, the interruption in consumer buying of durable goods forced a reduction in both employment and hours in this sector. Consequently, the durable goods manufacturing industries generated a modest overall increase in wages and salaries of 5.9 percent, but in the

TABLE 6
Michigan Manufacturing Industry Employment, 1977-1979

(Thousands)

	1977	1978	Dec. 1978	1979	1978-79 Dec. 1979	Percent Change
Total Manufacturing	1,120.2	1,153.3	1,194.5	1,131.6	1,090.9	-1.9
Durable Goods	897.8	927.5	960.9	908.4	873.0	-2.1
Lumber and Wood Products	14.4	14.2	14.6	14.1	13.4	-0.7
Furniture and Fixtures	20.0	21.0	21.8	21.9	21.6	4.3
Primary Metals	91.6	92.7	94.2	88.4	80.0	-4.6
Fabricated Metals	145.7	151.0	157.3	144.5	136.0	-4.3
Nonelectric Machinery	150.6	161.1	167.9	168.2	169.9	4.4
Electric Machinery	40.9	42.3	43.1	41.4	41.1	-2.1
Motor Vehicles and Equipment	378.5	389.0	405.4	375.4	358.2	-3.5
Other Transportation Equipment	13.6	14.0	14.2	13.1	12.2	-6.4
Other Durable Goods	42.5	42.2	42.4	41.4	40.6	-1.9
Nondurable Goods	222.4	225.8	233.6	223.2	217.9	-1.2
Food and Kindred	51.9	52.5	55.3	53.9	53.8	2.7
Textiles and Apparel	27.3	27.6	29.4	25.3	23.9	-8.3
Paper	24.3	23.0	23.2	23.3	22.6	1.3
Printing and Publishing	32.3	33.4	34.5	34.0	33.8	1.8
Chemicals and Petroleum	49.6	49.6	50.5	49.4	49.2	0.4
Other Nondurables	37.0	39.7	40.7	37.3	34.6	-6.0

Source: Michigan Employment Security Commission

TABLE 7

Michigan Nonmanufacturing Industry Employment, 1977-1979

(Thousands)

	1977	1978	Dec. 1978	1979	Dec. 1979	1978-79 Percent Change
Total Nonmanufacturing	1,717.8	1,797.8	1,852.0	1,843.4	1,877.3	2.5
Construction	122.8	138.9	147.3	143.3	141.2	3.2
Mining	12.1	11.8	11.6	11.8	11.4	0.0
Transportation, Communications, and Utilities	150.2	151.8	155.8	154.5	155.4	1.8
Wholesale Trade	151.8	162.9	167.0	159.9	161.0	-1.8
Retail Trade	557.1	577.7	600.0	591.1	616.4	2.3
Finance, Insurance, and Real Estate	142.2	145.7	147.2	149.5	151.7	2.6
Services	581.6	609.0	623.1	633.2	640.2	4.0

Source: Michigan Employment Security Commission

TABLE 8

Michigan Government Employment, 1977-1979

(Thousands)

	1977	1978	Dec. 1978	1979	Dec. 1979	1978-79 Percent Change
Total Government	596.7	617.7	628.4	617.5	634.2	0.0
Federal	54.7	55.0	55.0	55.9	54.9	1.6
State	136.8	142.8	146.0	137.1	143.0	-4.0
Local	405.2	419.9	427.4	424.6	436.3	1.1

Source: Michigan Employment Security Commission

TABLE 9
Michigan Labor Force and Employment, 1976-1980

(Thousands)

	1976	1977	1978	1979	Forecast 1980	1978-79 Percent Change	1979-80 Percent Change
Total Labor Force	4,000.0	4,124.0	4,202.0	4,325.0	4,370.0	2.9	1.0
Employment	3,626.0	3,786.0	3,913.0	3,989.2	3,917.0	1.9	-1.8
Unemployment	374.0	337.0	289.0	335.9	458.0	16.2	36.4
Unemployment Rate	9.4	8.2	6.9	7.8	10.5	13.0	34.6
Wage and Salary Employment	3,231.2	3,434.7	3,568.8	3,592.5	3,550.0	0.7	-1.2
Manufacturing	1,058.9	1,120.2	1,153.3	1,131.6	1,053.0	-1.9	-6.9
Durable Goods	844.9	897.8	927.5	908.4	839.0	-2.1	-7.6
Nondurable Goods	214.0	222.4	225.8	223.2	214.0	-1.2	-4.1
Nonmanufacturing	1,578.6	1,717.8	1,797.8	1,843.4	1,871.0	2.5	1.5
Construction	107.0	122.8	138.9	143.3	141.0	3.2	-1.6
Transportation, Communication and Utilities	141.3	150.2	151.8	154.5	158.0	1.8	2.3
Wholesale Trade	130.5	151.8	162.9	159.9	160.0	-1.8	0.1
Retail Trade	510.8	557.1	577.7	591.1	592.0	2.3	0.2
Finance, Insurance and Real Estate	123.3	142.2	145.7	149.5	151.0	2.6	1.0
Services	544.6	581.6	609.0	633.2	657.0	4.0	3.8
Mining	12.1	12.1	11.8	11.8	12.0	0.0	1.7
Government	593.7	596.7	617.7	617.5	626.0	0.0	1.4
Workers in Labor Disputes	6.4	6.9	5.4	5.2	---	-3.7	---

Source: Michigan Employment Security Commission and Michigan Department of Management and Budget.

TABLE 10
U.S. and Michigan Personal and Per Capita Income, 1950-1979

Year	Michigan Personal Income (millions)	Percent Change	U.S. Personal Income (millions)	Percent Change	Michigan Per Capita Income	Percent Change	U.S. Per Capita Income	Percent Change	Michigan Per Capita Income As Percent of U.S. Per Capita Income
1950	$10,895	13.2	$ 226,214	9.9	$1,701	N.A.	$1,496	N.A.	113.7
1951	12,176	11.8	253,232	11.9	1,874	10.2	1,645	10.9	113.9
1952	13,050	7.2	269,769	6.5	1,962	4.7	1,733	5.3	113.2
1953	14,741	13.0	285,456	5.8	2,161	10.1	1,796	3.6	120.3
1954	14,354	-2.4	287,607	0.7	2,031	-6.0	1,785	-0.6	113.8
1955	15,900	10.8	308,266	7.1	2,183	7.5	1,867	4.6	116.9
1956	16,529	4.0	330,479	7.2	2,214	1.4	1,975	5.8	112.1
1957	16,870	2.1	348,460	5.4	2,229	0.7	2,045	3.5	109.0
1958	16,520	-2.0	356,939	2.4	2,155	-3.3	2,049	0.2	105.2
1959	17,520	6.1	380,014	6.5	2,256	4.7	2,145	4.7	105.2
1960	18,225	4.0	396,086	4.2	2,326	3.1	2,201	2.6	105.7
1961	18,169	-0.3	411,301	3.8	2,302	1.0	2,248	2.1	102.4
1962	19,450	7.1	436,894	6.2	2,452	6.5	2,353	4.7	104.2
1963	20,770	6.8	459,075	5.1	2,578	5.1	2,436	3.5	105.8
1964	22,767	9.6	491,341	7.0	2,781	7.9	2,572	5.6	108.1
1965	25,386	11.5	532,022	8.3	3,038	9.2	2,750	6.9	110.5
1966	27,723	9.2	579,158	8.9	3,257	7.2	2,963	7.7	109.9
1967	29,046	4.8	620,020	7.1	3,366	3.3	3,142	6.0	107.1
1968	32,097	10.5	677,786	9.3	3,691	9.7	3,401	8.2	108.5
1969	34,803	8.4	738,233	8.9	3,963	7.4	3,667	7.8	108.1
1970	35,955	3.3	793,485	7.5	4,041	2.0	3,893	6.2	103.8
1971	39,191	9.0	851,952	7.4	4,371	8.2	4,132	6.1	105.8
1972	43,432	10.8	935,463	9.8	4,804	9.9	4,493	8.7	106.9
1973	48,467	11.6	1,045,303	11.7	5,341	11.2	4,981	10.9	107.2
1974	51,850	7.0	1,147,257	9.8	5,687	6.5	5,428	9.0	104.8
1975	54,737	5.6	1,248,631	8.8	6,008	5.6	5,861	8.0	102.5
1976	61,645	12.6	1,374,265	10.1	6,765	12.6	6,402	9.2	105.7
1977	69,480	12.7	1,523,631	10.9	7,595	12.3	7,042	10.0	107.9
1978	77,944	12.2	1,708,545	12.1	8,483	11.7	7,836	11.3	108.3
1979[1]	85,484	9.7	1,912,400	11.9	9,285	9.5	8,689	10.9	106.9

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1. Estimate

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

major durable goods industry in Michigan, automobiles, the increase in wages and salaries was a meager 0.1 percent. Employment fell 3.5 percent, and average earnings rose a slight 3.7 percent. By contrast, no such sharp decrease occurred in the nondurable goods industries, where wages and salaries increased 8.5 percent in 1979, down slightly from the 9.3 percent growth rate in 1978.

Activity in the nonmanufacturing sector of the economy softened much more modestly than in the manufacturing industries. Wages and salaries paid in the nonmanufacturing industries totaled $24.3 billion, up 12.3 percent compared with the increase of 15.1 percent in 1978. Among the individual nonmanufacturing industries, wages and salaries grew only in the finance, insurance, and real estate sectors, rising 14.4 percent in 1978 and 15 percent in 1979. High interest rates helped spur activity in the financial sector, and rising inflation led many people to increase their insurance coverage. Even though buying slowed near the end of 1979, home prices were still up significantly from a year ago and thus helped boost real estate earnings.

A modest decline in the growth of wage and salary payments occurred in the nonmanufacturing industries of retail trade and services during 1979. While the frequency at which consumers purchased durable goods diminished, consumer spending for nondurable goods remained healthy and was aided by the pre-Christmas sales retailers sponsored to keep inventory levels down. Consequently, retail trade employment rose 1.9 percent, average earnings increased 8.4 percent, and wages and salaries rose 10.4 percent in 1978.

The service sector, which has grown most steadily in Michigan since 1975, continued to grow significantly in 1979. Employment in services rose 3.9 percent, and average earnings jumped 8.9 percent. As a result, wages and salaries in the services sector rose 13.1 percent, a sizable increase, but not as high as the 14.7 percent increase in 1978.

Wages and salaries generated by the wholesale trade industry grew 12 percent in 1979, down markedly from the 16.6 percent growth rate in 1978. Much of this decline can be traced to the retailers' success in keeping their inventory levels down as consumer spending began exhibiting signs of slowing down in the last half of the year. The rate of wage and salary growth also declined moderately in the transportation, communication, and utility sectors, and in the trucking industry as well. Here, the growth of wages and salaries diminished from 14.4 percent in 1978 to 10.5 percent as the strike-lockout in April and a general slowing in economic activity exerted their influence.

Among all nonmanufacturing industries, the lowest rate of growth in wages and salaries was in contract construction. In 1978, the construction industry was booming, and wages and salaries grew 22.6 percent. A large increase in mortgage rates coupled with rising construction costs and falling real incomes retarded construction activity in 1979, however, and construction wages and salaries grew only 14 percent, down sharply from the previous year's rate.

Wages and salaries generated by government grew 8.4 percent in 1979 compared with 9.5 percent in 1978. Employment levels also fell and depressed the growth of government wages and salaries.

Sources of personal income other than wages and salaries totaled an estimated $28.2 billion in 1979 and composed 33 percent of total personal income. These sources grew 10.9 percent in 1979, up from the 10.8 percent growth rate in 1978, largely because gains in property income and transfer payments were significant.

Income derived from interest, dividends, and rent (property income) increased 12.8 percent in 1978, but record high interest rates in 1979 and the new money market instruments that broadened investment opportunities produced an increase of 14.2 percent in 1979. In 1978, transfer payments rose a modest 6.2 percent, but they increased 10.3 percent, to $11.6 billion, in 1979 as unemployment rose. State unemployment insurance benefits jumped to $631 million in 1979 from $483 million in 1978, an increase of 30.6 percent. Because the average insured unemployment rate from July to September exceeded 5 percent, workers were eligible for an additional 13 weeks of unemployment benefits through the federal extended benefit program. This extension, and an increase in the number of unemployed workers, accounted for the sharp rise in the state's unemployment benefits.

1980 Outlook

Personal income in 1980 is forecast to total $91.2 billion, an increase of 6.7 percent, but three percentage points below the 1979 increase. Real personal income in Michigan is expected to decline 4.5 percent. Wages and salaries are expected to increase only 5.5 percent, to $60.5 billion, as adverse economic conditions force additional reductions in employment and hours worked. Particularly hard hit will be the manufacturing industries, where wages and salaries will likely decline during the first half of the year before renewing their growth in the last half of the year. The result will be a slight, one percent increase for the year as a whole. The growth in wages and salaries in the nonmanufacturing industries is expected to fall to 8.7 percent from 12.3 percent in 1979, and the industry experiencing the most significant decline will again be contract construction.

The weakness in wages and salaries in 1980 will act to slow the growth of other labor income to 8 percent, from 10.8 percent in 1979. Economic conditions in 1980 are also expected to produce adverse effects on business earnings, particularly on the earnings of the smaller, specialty businesses. Therefore, proprietors' income is forecast to increase only 2.5 percent. The growth of property income is expected to decrease sharply to 5.5 percent compared with 14.2 percent in 1979 as interest rates fall and people have less money to invest because real income continues to decline. The major increase in 1980 will occur in transfer payments, which are expected to rise 16.7 percent to $11.6 billion. With Michigan's unemployment rate forecast to average 10.5 percent in 1980, state unemployment insurance benefits are expected to increase substantially.

TABLE 12
Michigan Personal Income 1978, 1979, and 1980 Forecast
(Millions)

	1978	1979	1980 Forecast	1978-79 Percent Change	1979-80 Percent Change
Wage and Salary Disbursements by Place of Work	$52,552	$57,330	$60,464	9.0	5.5
Farms	135	146	150	8.0	3.0
Manufacturing	22,857	24,301	24,549	6.3	1.0
Durables	19,263	20,402	20,548	5.9	0.7
Nondurables	3,594	3,899	4,001	8.5	2.6
Nonmanufacturing	21,621	24,273	26,380	12.3	8.7
Contract Construction	2,398	2,734	2,761	14.0	1.0
Trans., Comm. & Utilities	2,866	3,166	3,448	10.5	8.9
Wholesale Trade	2,752	3,082	3,359	12.0	9.0
Retail Trade	4,682	5,171	5,610	10.4	8.5
Finance, Ins. & Real Estate	1,854	2,132	2,345	15.0	10.0
Services	6,819	7,715	8,564	13.1	11.0
Mining	250	273	293	9.2	7.5
Government	7,850	8,507	9,273	8.4	9.0
Other Industries	89	103	112	15.7	9.0
Other Labor Income	6,735	7,462	8,059	10.8	8.0
Proprietors' Income	3,526	3,808	3,905	8.0	2.5
Farm	565	622	641	10.0	3.0
Nonfarm	2,961	3,186	3,264	7.6	2.4
TOTAL: Labor and Proprietors' Income by Place of Work	62,813	68,600	72,428	9.2	5.6
Less: Contributions for Social Insurance	3,051	3,520	3,872	15.4	10.0
Plus: Residence Adjustment	364	399	433	9.5	8.5
NET Labor and Proprietors' Income by Place of Residence	60,126	65,479	69,989	8.9	5.4
Property Income	8,801	10,055	10,608	14.2	5.5
Transfer Payments	9,016	9,950	11,610	10.3	16.7
TOTAL Personal Income	$77,944	$85,484	$91,207	9.7	6.7

Source: U.S. Department of Commerce, Bureau of Economic Analysis; Michigan Department of Management and Budget.

PRICES

1979 Developments

The major economic event in 1979 was the dramatic acceleration in the level of consumer prices. Retail prices in Michigan, as measured by the Detroit Consumer Price Index (DCPI) for all urban consumers, rose dramatically, from 7.6 percent in 1978 to an average annual rate of 12.7 percent in 1979. This increase in retail prices is the sharpest since 1947 when the removal of wartime price controls pushed prices up 13.8 percent.

The extremely high level of inflation experienced in 1979 can be traced to two basic underlying factors: the rising cost of oil and a decline in productivity. The Organization of Petroleum Exporting Countries (OPEC) price of oil at the beginning of 1979 was approximately $12.80 per barrel, but, by the end of the year, it was approximately $24 per barrel, an increase of 87.5 percent. In addition, the deregulation of the price of U.S. domestic oil increased the price of U.S. oil approximately 67 percent during 1979.

A more subtle, but still significant, contributor to inflation was productivity—the output per employee hour. During 1979, productivity declined by approximately 1.6 percent, and this increase in the cost of output thus added to inflation.

During 1979, the sharpest price increases occurred in the housing sector. Housing related retail prices climbed 16.6 percent compared with only 6.6 percent in 1978. A significant portion of this increase can be directly attributed to the rising price of oil, as the 11.2 percent increase in the index measuring prices for utilities included a dramatic 38.6 percent boost in the price of fuel oil, coal, and bottled gas. Piped natural gas and electricity prices rose at a more moderate rate of 12.2 percent. Increases in the prices of new homes, in mortgage rates, and in property taxes also added to the rise in housing related prices by advancing an average of 22 percent. Much of this increase can be traced to the large jump in mortgage rates as the seemingly unrelenting demand for new homes and the contraction of the funds available for home mortgages helped raise mortgage rates to unprecedented levels.

Transportation related prices also rose significantly, from 5.8 percent in 1978 to 13.2 percent in 1979. Private transportation prices increased 13.9 percent, in part, because gasoline prices rose so sharply. While no price index is available for gasoline prices in Michigan, the national index increased 35.3 percent. The price of public transportation, including airplanes, trains, and buses, rose an average of 7.5 percent.

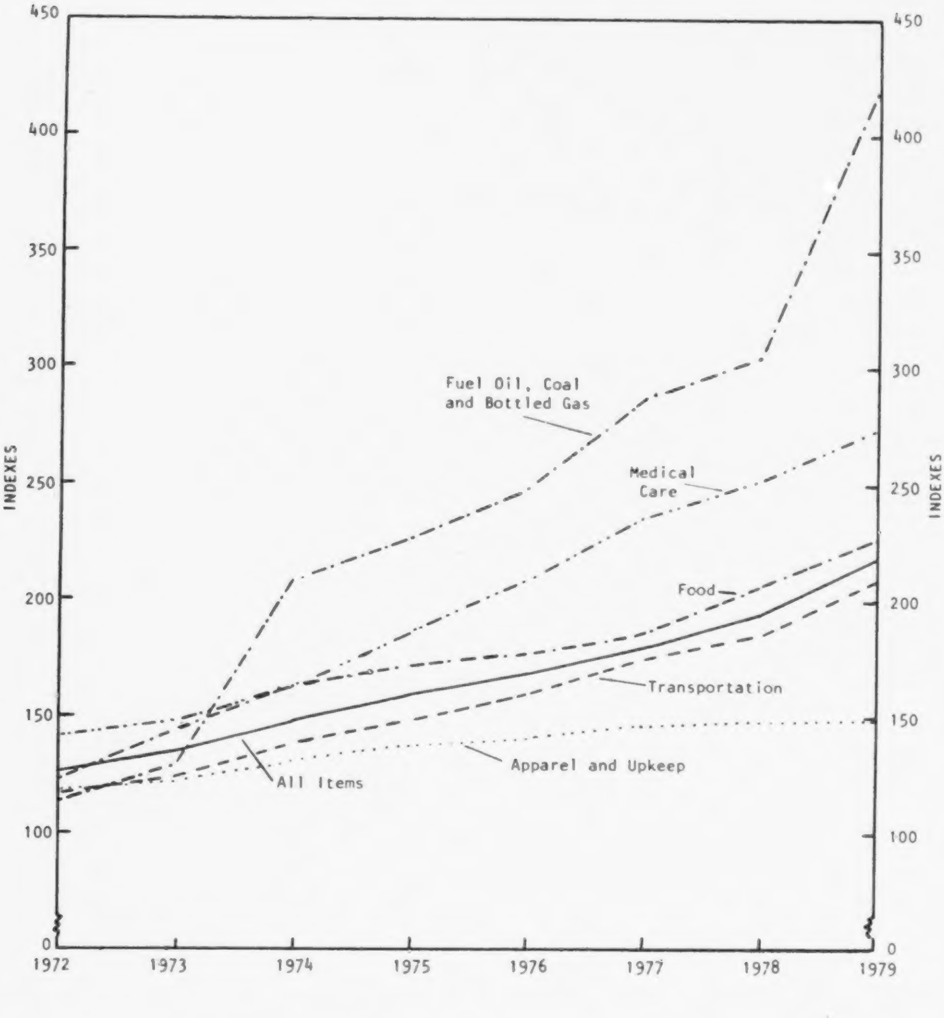
Food and beverage prices increased an average 10.3 percent in 1979, unchanged from the 1978 advance. The index measuring the price of meats, poultry, and fish increased 14.7 percent as the cutback in production caused by the 1974 price controls reduced the supply of beef. Rising costs in the processing and distribution stages of production, attributable in part to higher energy costs, caused a 17.1 percent increase in the price of dairy products. Increasing at relatively more moderate rates were the prices for cereal and bakery products, up 9.7 percent, and fruits and vegetables, up 5.4 percent.

Retail prices for apparel and upkeep commodities and services did not increase, on average in 1979, compared with 1 percent in 1978. The prices of men's clothing decreased 1.2 percent and women's apparel fell 2.9 percent, in part because of the strong competition from relatively less expensive foreign products.

1980 Outlook

During 1980, retail prices in Michigan are forecast to rise 11.3 percent. On a December-to-December basis, however, the increase from 1979 to 1980 will be 9.9 percent, a reflection of the slowdown in inflation. Two major factors will contribute to this modest decline in the rate of inflation. First, the economic recession, which is expected to last through the first half of 1980, should dampen consumer demand and therefore help ease the upward pressure on prices. Secondly, the rate of increase in petroleum related prices is expected to moderate in 1980 as conservation efforts grow, demand falls, and supply difficulties lessen. These inflation reducing factors will be somewhat offset by a further decline in productivity. The detailed inflation forecast is presented in Table 13.

CHART 1
Detroit Consumer Price Index, 1972-1979
(1967=100)



Source: U.S. Department of Labor, Bureau of Labor Statistics.

1979 Developments

After three years of above average growth, consumer spending in Michigan began to weaken in 1979. Taxable retail sales in Michigan increased 7.6 percent above the 1978 level, but sales increased only 5.8 percent in the second half of the year compared with 9.6 percent in the first two quarters. (See Table 14.) In real terms, taxable retail sales actually declined 4.5 percent in 1979, whereas they had increased 6.3 percent in 1978.* (See Chart 2.)

The slower rate of growth in consumer spending resulted mainly from a decrease in the growth rate of Michigan personal income. This weakness, which developed mainly in the last half of the year, can be traced directly to the reduction in automobile sales that began in the

TABLE 14
Quarterly Michigan Retail Sales Tax Collections, 1976-1980
(Millions)

	I	II	III	IV	Total	Percent Change
1976	$256.0	$271.3	$285.1	$282.2	$1,094.6	13.2
1977	293.0	307.0	326.7	326.7	1,253.4	14.5
1978	322.9	347.4	365.6	365.6	1,401.5	11.8
1979	362.3	375.5	391.2	388.0[1]	1,517.0	8.2
1980[2]	377.3	397.4	420.9	425.3	1,620.9	6.8

1. Preliminary.
2. Estimate.

Source: Michigan Department of Treasury.

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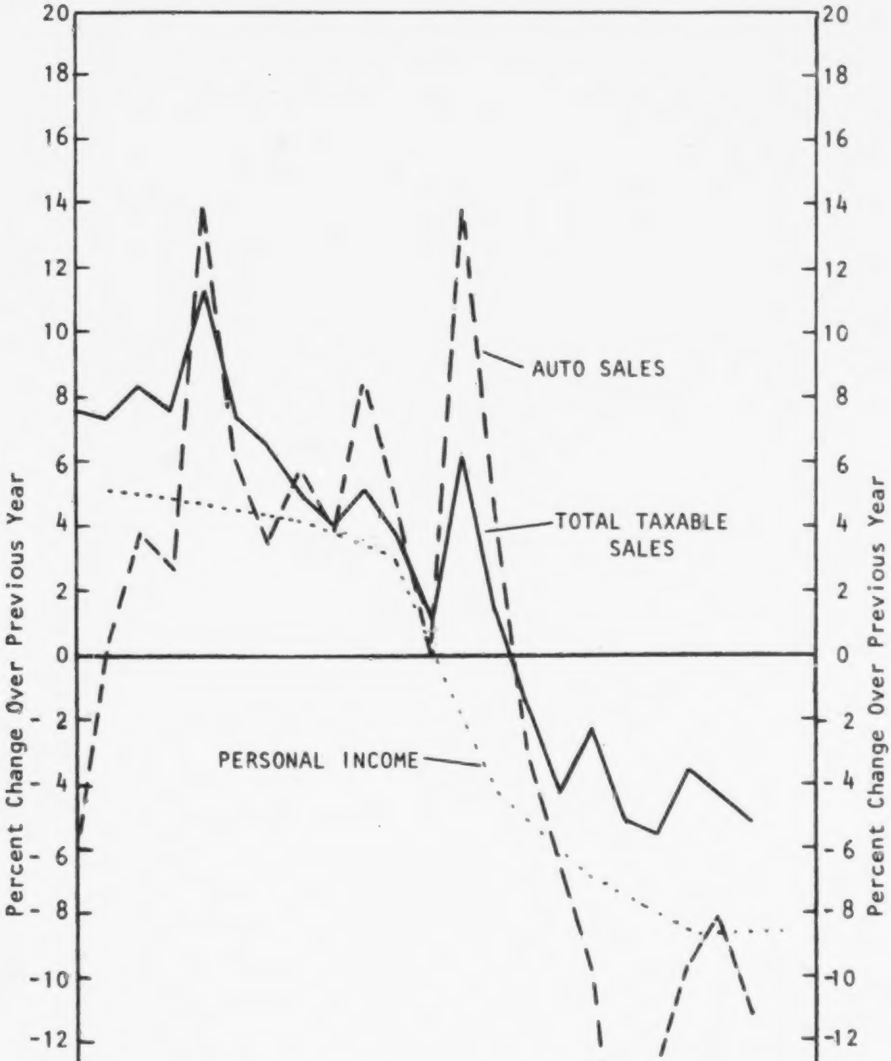
*Michigan retail sales were deflated using the taxable commodities less food component of the Detroit Consumer Price Index. Although this measure is better than the over all index, which covers many items not subject to the Michigan sales tax, it does not coincide perfectly with taxable retail sales; therefore, this figure should be viewed as an estimate.

CHART 2
Michigan Total Taxable Sales, Auto Sales, and Personal Income Adjusted for Inflation, 1978-1979



Source: Michigan Department of Management and Budget.

spring. As the year progressed, the debilitating effect of the decline in auto sales began to spread throughout the entire manfacturing sector and led to decreases in employment and sharp reductions in the average work week. In the first quarter, the construction sector also weakened, due to the Federal Reserve Board's tight money policy. For the year as a whole, then, the growth rate of Michigan personal income fell a full 2.5 percentage points, from 12.2 percent in 1978 to 9.7 percent in 1979.

The major source of weakness in retail sales in 1979 was in new and used vehicles. Sales declined 3 percent, although revenue from all components of the automotive category increased 4 percent, mainly because sales tax collections from gasoline stations increased 19 percent. The other major area of weakness was in general merchandise sales, which increased only 5.4 percent compared with 8.3 percent in 1978. The growth in apparel sales was also below average, only 6.2 percent, as apparel prices did not increase in 1979. Only nonretail sales increased more in 1979 than in 1978 and, again, this increase—some 14 percent—was due largely to a 33.8 percent increase in sales of petroleum and related products (see Table 15).

1980 Outlook

There is little reason to be optimistic about consumer spending in 1980, particularly in the first half of the year. The weakness in Michigan retail sales that developed in the last few months of 1979 is expected to continue until late in the summer of 1980. In 1979, the consumer dipped into savings and continued to accumulate large amounts of debt to maintain spending levels despite declines in real personal income. This year is likely to be a year of retrenchment for the consumer, as savings are rebuilt and debts paid off.

Michigan personal income is projected to increase 6.7 percent in 1980, but will decline 4.1 percent in real terms. This compares with a 2.7 percent decline in real Michigan personal income in 1979. This decline in real income combined with increased savings, continued weakness in the automobile and construction industries, and rising unemployment will slow sharply the growth in consumer spending. In the short run, the slowdown in the rate of inflation will reduce nominal gains in consumer spending, but over the longer term slower inflation will increase consumer spending by restoring consumer confidence and reducing the erosion of earnings.

Consumer confidence declined throughout 1979, and while the state of consumer expectations is near or at all-time record lows, attitudes toward buying conditions, although much less favorable than in late 1978, have only declined moderately in comparison to previous declines. The November University of Michigan Consumer Sentiment Index was 63.3, only 5.3 points above the record low recorded in 1975, and 11.7 points below the year earlier level.

Although consumer sentiment has been declining since early 1977, due largely to accelerating inflation, consumer spending continued

TABLE 11
U.S. and Michigan Real Personal and Per Capita Income, 1950-1979[1]

Year	Real Michigan Personal Income (millions)	Percent Change	Real U.S. Personal Income (millions)	Percent Change	Real Michigan Per Capita Income	Percent Change	Real U.S. Per Capita Income	Percent Change	Michigan Real Per Capita Income as Percent of U.S. Real Per Capita Income
1950	$14,924	N.A.	$ 313,750	N.A.	$2,330	N.A.	$2,074	N.A.	112.3
1951	15,452	3.5	325,491	3.7	2,378	2.1	2,114	1.9	112.4
1952	16,171	4.7	339,332	4.3	2,431	2.2	2,180	3.1	111.5
1953	17,977	11.2	356,375	5.0	2,635	8.4	2,242	2.8	117.5
1954	17,441	-3.0	357,276	0.3	2,468	-6.3	2,217	-1.1	111.3
1955	19,343	10.9	384,372	7.6	2,656	7.6	2,328	5.0	114.1
1956	19,724	2.0	405,994	5.6	2,642	0.5	2,426	4.2	108.9
1957	19,571	-0.8	413,357	1.8	2,586	-2.1	2,426	0.0	106.6
1958	18,880	-3.5	412,170	-0.3	2,463	-4.8	2,366	-2.5	104.1
1959	20,046	6.2	435,297	5.6	2,581	4.8	2,457	3.8	105.0
1960	20,663	3.1	446,546	2.6	2,637	2.2	2,481	1.0	106.3
1961	20,484	-0.9	459,041	2.8	2,595	-1.6	2,509	1.1	103.4
1962	21,879	6.8	482,223	5.1	2,758	6.3	2,597	3.5	106.2
1963	23,129	5.7	500,627	3.8	2,870	4.1	2,656	2.3	108.1
1964	25,157	8.8	528,892	5.6	3,073	7.1	2,769	4.3	111.0
1965	27,415	9.0	562,986	6.4	3,281	6.8	2,910	5.1	112.7
1966	28,669	4.6	595,842	5.8	3,368	2.7	3,048	4.7	110.5
1967	29,046	1.3	620,020	4.1	3,366	-0.1	3,142	3.1	107.1
1968	30,774	5.9	650,466	4.9	3,539	5.1	3,264	3.9	108.4
1969	31,467	2.3	672,343	3.4	3,583	1.2	3,340	2.3	107.3
1970	30,626	-2.7	682,274	1.5	3,442	-3.9	3,347	0.2	102.8
1971	32,203	5.1	702,351	2.9	3,592	4.4	3,406	1.8	105.5
1972	34,415	6.9	746,579	6.3	3,807	6.0	3,586	5.3	106.2
1973	36,035	4.7	785,352	5.2	3,971	4.3	3,742	4.4	106.1
1974	34,775	-3.5	776,748	-1.0	3,814	-4.0	3,675	-1.8	103.8
1975	34,147	-1.8	774,585	-0.3	3,748	-1.7	3,636	-1.1	103.1
1976	36,498	6.9	806,021	4.1	4,005	6.9	3,755	3.3	106.7
1977	38,515	5.5	839,466	4.1	4,210	5.1	3,880	3.3	108.5
1978	40,156	4.3	874,383	4.2	4,370	3.8	4,010	3.4	109.0
1979[2]	39,069	-2.7	879,669	0.7	4,243	-2.9	3,997	-0.3	106.2

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[1] Michigan personal income deflated by Detroit SMSA Consumer Price Index; U.S. personal income deflated by U.S. CPI.
[2] Estimate.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

TABLE 13
Price Changes for the Detroit CPI: 1978, 1979, and 1980 Forecast
(Percent Change)

	1978	1979		1980 Forecast	
	Annual Average	Dec. '78 to Dec. '79	Annual Average	Dec. '79 to Dec. '80	Annual Average
All Items	7.6	15.3	12.7	9.9	11.3
Food	10.5	8.6	10.2	8.5	8.9
Housing	6.6	21.8	16.6	11.5	14.5
Home Ownership	8.6	30.2	22.0	15.0	15.3
Fuel Oil, Coal and Bottled Gas	6.9	57.4	38.6	25.2	38.0
Household Furnishings and Operations	0.7	6.6	8.1	6.6	8.0
Apparel and Upkeep	1.0	-0.9	0.0	1.5	1.5
Transportation	5.8	17.2	13.6	11.0	13.3
Private	5.5	17.2	13.9	11.2	13.5
Gasoline[1]	4.3	52.2	35.3	27.5	35.0
Public	11.7	17.1	7.5	5.7	6.0
Medical Care	7.2	11.1	9.0	8.9	9.0

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1. U.S. CPI.

Source: U.S. Department of Labor, Bureau of Labor Statistics; Michigan Department of Management and Budget.

TABLE 15
Michigan Retail Sales Tax Collections[1] By Component, 1977-1979

(Thousands)

Component	1977	1978	Percent Change	1979	Percent Change
Building Materials	$ 89,954	$ 106,265	18.1	$ 117,401	10.5
General Merchandise	128,387	139,045	8.3	146,490	5.4
Automotive	334,110	367,632	10.0	382,234	4.0
New and Used Vehicles	228,673	250,998	9.8	243,442	-3.0
Service Stations, Other	105,437	116,634	10.6	138,792	19.0
Food	190,503	212,952	11.8	230,804	8.4
Restaurants and Taverns	96,956	111,082	14.6	121,045	9.0
Food Stores and Caterers	93,547	101,870	8.9	109,759	7.7
Apparel	58,241	62,579	7.5	66,431	6.2
Furniture	56,789	65,159	14.7	70,691	8.5
Miscellaneous Retail	121,567	136,513	12.3	148,162	8.5
Drug, Beer, Liquor Stores	29,407	32,957	12.1	36,570	11.0
Other Retail Stores	92,160	103,556	12.4	111,592	7.8
Nonretail	278,792	318,168	14.1	362,799	14.0
Gas and Electricity	96,824	104,534	8.0	114,911	9.9
Wholesale Trade	24,335	28,969	19.0	33,364	15.2
Petroleum and Products	23,053	24,737	7.3	33,101	33.8
Other	134,580	159,928	18.8	181,423	13.4
TOTAL	$1,258,343	$1,408,313	11.9	$1,525,012	8.3

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1. Includes penalty, interest, and license fees. Sales figures do not correspond perfectly with the calendar year because collections lag behind activity by one month.

Source: Michigan Department of Treasury.

strong until recently because of the "buy in advance" psychology. However, the recent declines in price expectations combined with high interest rates have begun to reduce the appeal of advance buying in favor of postponement of purchases. These findings support the forecast that declines in consumer sales will accelerate in the near term, especially for houses and automobiles.

Consumers continued to take on new debt at a fast pace in 1979, although there was some slowdown from the record 1978 pace, particularly in the last half of the year. (See Table 16.) The net change in the amount of consumer installment debt outstanding increased an average of $3.7 billion a month in 1978 and only $3.3 billion in the first 10 months of 1979. However, this decline was due mainly to a drop in automobile credit from an average of $1.6 billion a month in 1979 to an average of $1.2 billion in the first 10 months of 1979. Excluding automobiles, the average monthly change in credit outstanding declined only 4 percent from the record 1978 level. Consumer installment credit is more a coincident than a leading indicator, which limits its usefulness as a forecasting tool. However, in view of continued willingness to spend in 1979, despite the weakening economy, it is significant that the consumers' desire to take on new debt appears to have peaked and should provide less support to consumer spending in 1980.

One final negative factor is that the saving rate is at a near record low and is unlikely to decline much further. Therefore, savings will not be a supporting factor for consumer spending as it was in 1979 and, in fact, could reduce consumer spending about 1 to 1 1/2 percent below the forecast if the saving rate just returns to the level of 1976-1977, which was sharply below the 7 1/2 to 8 percent rate of the 1973-1975 period.

The only positive factor in the consumer spending outlook is the likelihood of the enactment of a $30 billion tax cut sometime during the summer of 1980. This will provide a small stimulus to consumer spending in the second half of the year, but will fall far short of offsetting the $5 billion increase in social security taxes and the $15.6 billion increase in federal income taxes resulting from taxpayers' being pushed into higher tax brackets by inflation.

Based on the assumptions detailed above, Michigan taxable retail sales are projected to increase 7.5 percent in 1980; however the increase in the first half of the year is expected to be only 5.5 percent. (See Table 14.) After adjustment for expected price changes, Michigan retail sales will actually decline 3.4 percent in 1980. The automotive component of retail sales is projected to increase only 2.9 percent.

POPULATION

1979 Developments

The population of Michigan grew from an adjusted official total of 8,881,826 in April, 1970, to an estimated 9,207,000 in July, 1979. This increase represents an average annual growth rate of 0.4 percent, less than a third of the 1.3 percent average annual growth rate between 1960 and 1970. The slackening of the growth rate since 1970 has been caused by out-migration and a general decline in births.

The proportion of the U.S. population residing in Michigan also has decreased in recent years, from 4.4 percent in 1970 to 4.2 percent in 1978 and 1979. In the past 10 years (1970-1979), migration has resulted in a net loss of 295,000 people in Michigan. Net out-migration increased substantially between 1974 and 1976 because of the severe impact of the energy crisis on Michigan's economy, but it slowed thereafter until 1979, when a slight increase occurred.

Nonetheless, out-migration has slowed the overall rate of population growth, which was, until recent years, higher than the national rate. Since the 1970 Census, however, it has decreased, from 87 percent of the national rate in 1971 to only 34 percent between 1978 and 1979.

Within Michigan, only 10 percent of the population growth between 1960 and 1970 took place in nonmetropolitan areas, but over 62 percent of the growth occurred there between 1970 and 1978. About one-third of this growth occurred in the northern half of the Lower Peninsula. Since 1978, however, the rapid growth of the first half of the decade, which was caused by migration to the northern Lower Peninsula, has slowed. As Chart 3 shows, while most counties in the state experienced a rate of growth exceeding the state rate (3.7 percent between 1970 and 1978), some counties in metropolitan areas had slower growth rates or population losses.

Nationally, according to the March, 1978, *Current Population Survey,* about 70 million people, or 34 percent of the population three years old and over, changed their residence between March, 1975, and March, 1978. In the North Central Region, which includes Michigan, a similar proportion, some 18 million people, moved during these three years. Within Michigan during this period, more persons moved away from metropolitan areas than moved to them. Metropolitan areas had a net loss of 359,000 persons through migration, while nonmetropolitan areas had a net gain from migration of 106,600 between 1970 and 1978, a 7 percent increase over their 1970 population. Except for the Ann Arbor metropolitan area, all metropolitan counties in which central cities are located continued to lose population through migration.

Between 1970 and 1978, the total net out-migration from the central metropolitan counties was 500,700, a 10 percent loss. By contrast, the metropolitan counties without central cities gained 6 percent, or 141,300, through migration during the same period. The highest rates of net in-migration, however, were recorded by the suburbs of central cities in metropolitan areas.

For the third consecutive year, in Michigan and the U.S. as well, the number of births increased in 1979, a reversal of the steady decline since 1970. Births in Michigan are estimated at 142,000 for 1979 or approximately 16 births per 1,000 persons.

Although births are increasing as the post-World War II population comes of child-bearing age, the number of children that women 18 to 34 years old state they would like to have is declining, from 2,160 per thousand women in 1976 to 2,113 in 1978.

The total fertility rate in 1978 was 1,795 births per thousand women, an estimated 1.8 children per woman. This rate is significantly below the natural replacement level of 2,115 children per 1,000 women, and is expected to remain so as the number of women who are delaying childbearing or remaining childless increases. For example, in 1976, 25.1 percent of the women without children indicated that they did not expect to have a child in the future; in 1978, the percentage was 26.5. Both the delay of childbearing and the decision to remain childless are affected by the increase in female labor force participation, which rose from 41.3 percent in 1970 to 50 percent in 1979. Thus, lower fertility rates are expected to continue.

The age composition of Michigan's population also has been changing, as both the number and proportion of the population under 18 declined since 1970, despite the rise in births since 1977. By contrast, the number and the proportion of the population aged 18-44 are still increasing, but at a rate below the national rate. The older population (65 and older) is growing steadily in both number and proportion. In 1970, about 8.5 percent of the population was 65 or older, whereas, in 1978, this older group is estimated at 885,000 or 9.6 percent of Michigan's population.

The death rate for Michigan, and for the U.S. as well, remained fairly stable during the 1970-79 period. The life expectancy of Americans at birth has increased, however, from 70.9 years in 1970 to 73.2 years in 1977. In Michigan, life expectancy was 70.8 years in 1970 and 72.7 years in 1977. The death rate fell slightly during the decade, from 8.6 deaths per thousand people in 1970 to about 8 per thousand in 1979.

Despite the slackening of population growth in Michigan, the number of households has increased two percent annually, from about 2.7 million in 1970 to 3.1 million in 1978. The number of persons per household fell substantially, however, from 3.26 in 1970 to only 2.94 in 1978, as the number of people living alone or with other unrelated individuals increased. Nationally, only 7.7 percent of all households were maintained by one person in 1940. By 1970, this percentage was 17.1 percent, in 1979, it was an estimated 22.2 percent.

Family households also have changed substantially. Before 1970, more than 70 percent of all households included both husband and wife. By 1978, husband and wife lived together in slightly over 60 percent of all households. In addition, the proportion of families maintained solely by women has increased, from 10.8 percent in 1970 to 14.9 percent in 1979. These changes in household size and family composition have had a significant impact on consumption patterns and affect a wide range of different needs, from types of housing and household goods to many kinds of services.

1980 Outlook

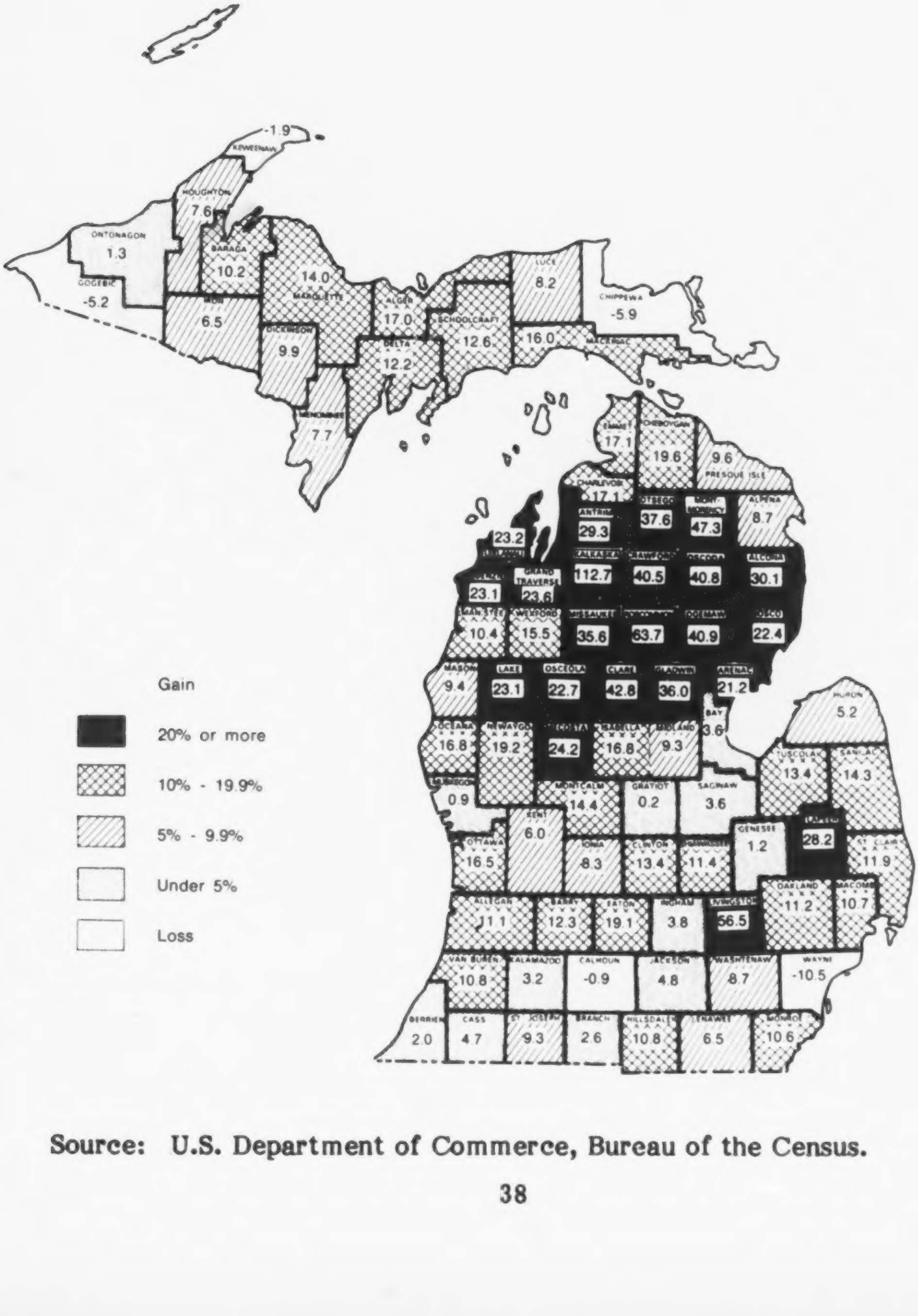
Michigan's rate of population growth will be about the same in 1980 as it was in 1979. The large number of women of childbearing age should cause an increase in the number of births, but current economic conditions will increase net out-migration. By July, 1980, the population of the state will be an estimated 9.24 million.

The population aged 18-44 should continue to increase in 1980. Although births will increase, the total population under 18 will not, but the number of children reaching school age will grow during the next five years. The older population, 65 and over, will increase to more than 900,000, or 9.7 percent of the Michigan population, in 1980, a sharp increase from 1970 when only 8.5 percent of the population was in this age group.

Shifts in population from metropolitan to nonmetropolitan areas will continue in 1980, but at slower rates than previously. The larger cities in metropolitan areas are expected to continue to lose population. Net in-migration to the Upper and the northern Lower Peninsula will slow down substantially or even reverse in some counties as the current fuel shortage and high cost of energy persist for the forseeable future.

Changes in household composition and the increase in the number of households will continue in 1980. Household size will drop again, to about 2.9 persons per household. Family households maintained by women will continue to increase, as will the number of people living alone or with unrelated individuals.

CHART 3
Percent Change in Michigan Population, 1970-1978



-1.9
KEWEENAW
HOUGHTON
7.6
ONTONAGON
1.3
GOGEBIC
-5.2
BARAGA
10.2
IRON
6.5
14.0
MARQUETTE
DICKINSON
9.9
MENOMINEE
7.7
ALGER
17.0
DELTA
12.2
SCHOOLCRAFT
12.6
LUCE
8.2
CHIPPEWA
-5.9
16.0
MACKINAC
EMMET
17.1
CHEBOYGAN
19.6
9.6
PRESQUE ISLE
CHARLEVOIX
17.1
ANTRIM
29.3
OTSEGO
37.6
MONT-MORENCY
47.3
ALPENA
8.7
23.2
GRAND TRAVERSE
23.6
23.1
KALKASKA
112.7
CRAWFORD
40.5
OSCODA
40.8
ALCONA
30.1
MANISTEE
10.4
WEXFORD
15.5
MISSAUKEE
35.6
63.7
OGEMAW
40.9
IOSCO
22.4
MASON
9.4
LAKE
23.1
OSCEOLA
22.7
CLARE
42.8
GLADWIN
36.0
ARENAC
21.2
BAY
3.6
HURON
5.2
OCEANA
16.8
NEWAYGO
19.2
24.2
ISABELLA
16.8
MIDLAND
9.3
TUSCOLA
13.4
SANILAC
14.3
0.9
MONTCALM
14.4
GRATIOT
0.2
SAGINAW
3.6
KENT
6.0
GENESEE
1.2
28.2
OTTAWA
16.5
IONIA
8.3
CLINTON
13.4
11.4
ST CLAIR
11.9
OAKLAND
11.2
MACOMB
10.7
ALLEGAN
11.1
BARRY
12.3
EATON
19.1
INGHAM
3.8
LIVINGSTON
56.5
VAN BUREN
10.8
KALAMAZOO
3.2
CALHOUN
-0.9
JACKSON
4.8
WASHTENAW
8.7
WAYNE
-10.5
BERRIEN
2.0
CASS
4.7
ST JOSEPH
9.3
BRANCH
2.6
HILLSDALE
10.8
LENAWEE
6.5
MONROE
10.6
Gain
20% or more
10% - 19.9%
5% - 9.9%
Under 5%
Loss

Source: U.S. Department of Commerce, Bureau of the Census.

STATE AND REGIONAL COMPARISONS

1979 Developments

The assessment of Michigan's economic well-being requires an analysis of how the state's economy performed relative to other industrialized states. The regional rates of economic growth throughout the United States are continuing to move toward the national average as the rate of growth of the mature economies of the Mideast, Far West, New England, and Great Lakes states diminishes relative to the South, Rocky Mountain, and Plains regions. It appears that the forces of competition and market expansion are narrowing the wage differentials between regions and, hence, the regional gap in living standards and economic strength is closing. These trends are suggested by evidence on movements in personal income and earnings, both currently and since the late 1920s. Variations in the size of the labor force and unemployment rates provide additional information on these trends.

Personal income growth in Michigan kept pace with the national average of 12.1 percent from 1977 to 1978. In the first six months of 1979, personal income in Michigan grew only 9.2 percent over the comparable period in 1978, the lowest growth in ten industrial states. (see Table 17).*

Regional differences show that personal income grew more slowly than average in the Great Lakes, New England, and Mideast areas from 1977 to 1978, and in the Southeast as well in the first six months of 1979. Thus, the trend toward an equalizing of levels of personal income continues as the older industrialized regions of the country grow at a slower rate than the southern and western regions (Table 18).

In 1978, Michigan's per capita personal income remained eight percent above the national average of $7,836 and higher than all but two of the ten industrialized states. As Table 19 indicates, only in Texas and Florida did per capita personal income grow faster than in Michigan. Michigan's slower personal income growth and faster per capita personal income growth is partly the result of some net out-migration during recent years.

Chart 4 illustrates these regional trends in per capita personal income growth from 1929 to 1978, while Table 20 presents the data for the two most recent years for which information is available. The long-run trend has been for per capita personal income in the mature,

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*Throughout this section, data are presented in current dollar amounts to reflect both the nominal increases resulting from inflation and real increases brought about by productivity increases.

TABLE 17

Personal Income in Selected States, 1977, 1978, and First Half 1978 and 1979

(Seasonally adjusted in billions)

State	1977	1978	Percent Change	Jan.-June 1978	Jan.-June 1979	Percent Change
United States	$1,523.6	$1,708.5	12.1	$826.7	$931.6	12.7
MICHIGAN	69.5	77.9	12.1	37.9	41.4	9.2
Ohio	75.6	84.4	11.6	40.8	46.2	13.2
Illinois	90.3	100.1	10.9	48.8	54.3	11.3
Indiana	36.9	41.4	12.2	20.0	22.6	13.0
Wisconsin	31.5	35.2	11.7	17.2	19.2	11.6
Pennsylvania	82.5	90.9	10.2	44.1	49.1	11.3
New York	133.7	146.0	9.2	71.1	78.5	10.4
Florida	57.0	65.1	14.2	31.3	36.1	15.3
California	175.2	199.0	13.6	95.8	109.1	13.9
Texas	88.2	100.6	14.1	48.4	55.5	14.7

Source: *Survey of Current Business,* U.S. Department of Commerce, Bureau of Economic Analysis, October, 1979.

TABLE 18

Personal Income by Region, 1977, 1978, and First Half 1978 and 1979

(Seasonally adjusted in billions)

Region	1977	1978	Percent Change	Jan.-June 1978	Jan.-June 1979	Percent Change
United States	$1,523.6	$1,708.5	12.1	$826.7	$931.6	12.7
GREAT LAKES	304.2	339.1	11.5	164.7	183.7	11.5
New England	87.6	96.8	10.5	47.1	52.3	11.0
Mideast	316.5	347.5	9.8	169.1	187.2	10.7
Plains	114.3	130.2	13.9	62.9	71.4	13.5
Southeast	296.9	334.2	12.6	166.2	183.3	10.3
Southwest	128.2	146.5	14.3	70.4	81.2	15.3
Rocky Mountain	39.4	45.3	15.0	21.8	25.2	15.6
Far West	225.4	257.1	14.1	123.9	141.3	14.0

Source: *Survey of Current Business,* U.S. Department of Commerce, Bureau of Economic Analysis, October, 1979.

TABLE 19
Per Capita Personal Income, Selected States, 1977 and 1978

State	1977	1978	Percent Change	Percent of National Average 1977	Percent of National Average 1978
United States	$7,042	$7,836	11.3	100	100
MICHIGAN	7,595	8,483	11.7	108	108
Ohio	7,102	7,855	10.6	101	100
Illinois	8,046	8,903	10.7	114	114
Indiana	6,906	7,706	11.6	98	98
Wisconsin	6,775	7,532	11.2	96	96
Pennsylvania	6,997	7,740	10.6	99	99
New York	7,457	8,224	10.3	106	105
Florida	6,728	7,573	12.6	96	97
California	8,003	8,927	11.5	114	114
Texas	6,891	7,730	12.2	98	99

Source: *Survey of Current Business,* U.S. Department of Commerce, Bureau of Economic Analysis, August, 1979.

industrialized regions of the Great Lakes, Mideast, Far West, and New England to exceed the national average, but to converge toward the average over time. Starting from below average levels of per capita personal income growth, the Rocky Mountain, Plains, Southwest, and Southeast regions have also been moving toward the national average.

Recent labor statistics, presented in Table 21, indicate that the national unemployment rate rose from a year ago, as it did in all the Great Lakes states except Wisconsin. Michigan's unemployment rate is higher than the national average both because the national economic slowdown has a more powerful effect on the state's durable goods manufacturing industries, and because the state had a larger increase in its labor force.

1980 Outlook

The third quarter of 1979 was characterized by a slowing economy and the first half of 1980 is expected to exhibit even slower growth. During 1980, Michigan will experience a decrease in real personal income as the manufacturing and construction industries are affected by the economic slowdown and financing charges remain high.

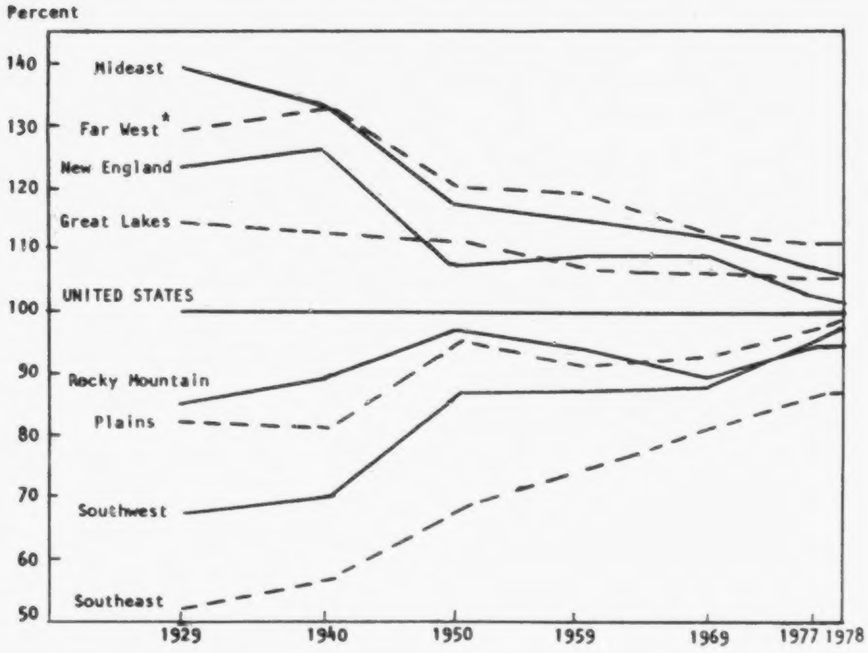
Regional per capita personal income should continue to equalize, but at a slower pace, as labor costs and tax burden differentials narrow and the relative attractiveness of the southern and western regions of the country diminishes. Nevertheless, differences in energy costs and climate may still lure individuals and business to these regions.

TABLE 20
Per Capita Personal Income by Region, 1977 and 1978

Region	1977	1978	Percent Change	Percent of National Average 1977	Percent of National Average 1978
United States	$7,042	$7,836	11.3	100	100
GREAT LAKES	7,407	8,224	11.0	105	105
New England	7,159	7,900	10.4	102	101
Mideast	7,452	8,230	10.4	106	105
Plains	6,761	7,650	13.1	96	98
Southeast	6,089	6,733	10.6	86	86
Southwest	6,703	7,527	12.3	95	96
Rocky Mountain	6,656	7,478	12.3	95	95
Far West	7,885	8,812	11.8	112	112

Source: *Survey of Current Business,* U.S. Department of Commerce, Bureau of Economic Analysis, August, 1979.

CHART 4
Per Capita Income as a Percent of the National Average, BEA Regions, Selected Years



*Including Alaska and Hawaii.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

TABLE 16
Consumer Installment Credit, 1974-1979
(Millions)

		Installment Credit Extended				Net Change in Amount Outstanding			
		Total		Automobile		Total		Automobile	
Year		Credit	% Change	Credit	% Change	Credit	% Change	Credit	% Change
1974		$172,765	-0.2	$46,514	-6.2	$ 9,489	-53.1	$ 495	-91.6
1975		180,441	4.4	52,420	12.7	7,765	-18.2	2,976	501.2
1976		211,028	17.0	63,743	21.6	21,647	178.8	10,465	251.7
1977		254,071	20.4	75,641	18.7	35,278	63.0	15,204	45.3
1978		298,351	17.4	88,987	30.4	44,810	27.0	19,557	28.6
1979[1]	I	314,132	1.5	92,396	-0.4	41,020	-46.6	18,928	-14.5
	II	324,196	12.8	93,748	5.8	39,876	-11.2	13,208	-120.9
	III	332,260	10.0	94,176	1.8	37,340	-25.4	12,132	-32.6

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1. Quarterly averages expressed at an annual rate.

Source: *Economic Indicators*, Council of Economic Advisors, November, 1979.

MICHIGAN SECTOR ANALYSIS

- Motor Vehicle and Equipment Industry
- Energy
- Finance
- Construction
- Agriculture
- Mineral Supplies and Mining
- Transportation
- Tourism
- International Trade

MOTOR VEHICLE AND EQUIPMENT INDUSTRY

1979 Developments

In 1979, the Corporate Average Fuel Economy (CAFE) required by the Energy Policy and Conservation Act of 1975 was 19 miles per gallon (mpg). Because gasoline prices rose more than 35 percent during the year and gasoline shortages plagued the nation in the spring and early summer, the American consumer demanded even higher mileage. This contrast, between federal standards and consumer demand, provides an important insight into the previous year's history and the current year's forecast.

In its fourth year of recovery from the 1974-75 recession, the U.S. motor vehicle industry had annual sales of 14.1 million units. In 1979, passenger car sales totaled 10.7 million units, and truck sales totaled 3.5 million units. Sales of imported passenger cars reached 2.3 million units and imported trucks about 0.5 million units. Sales of all passenger cars declined 5.7 percent, while truck sales fell 18.1 percent from 1978. By contrast, sales of imported passenger cars rose by 16.9 percent, and imported truck sales increased even more, some 39.6 percent. Thus, while the year was a respectable one for the industry, domestic manufacturers suffered from both energy and economic problems, and the decline in domestic sales induced similar decreases in domestic production. A more detailed discussion of these problems and the reaction of the market to them will sharpen the focus on the 1980 outlook.

Passenger Cars

The 1979 model year began with aggressive marketing campaigns by the domestic manufacturers, who stressed improvements in the fuel efficiency and the styling of the smaller sized domestic fleet. The success of this sales strategy resulted, in part, from the prevailing "buy in advance to beat inflation" attitude of the consumer. In the first quarter of 1979 sales of passenger cars accelerated and nearly reached previous records as consumers attempted to offset rising gasoline prices with more fuel efficient vehicles. Sales in this quarter totaled more than 2.7 million units.

Imports and subcompacts also benefited from the desire for cars with better gas mileage. Imports increased their share of the market to 20.2 percent, while subcompacts took 17.7 percent. Interestingly, luxury and full size models lost only 3.4 percentage points, while, compact cars lost over 2 percentage points. In a major market shift, intermediate cars fell 4.6 percentage points, to 21.9 percent of the market. After the 1973-74 energy crisis, individuals substituted intermediate vehicles for full size and, to some extent, luxury models. The beginning of a second energy crisis therefore stimulated another shift in the market, and the bulk of the consumers moved away from intermediate class cars. The surprising decline in the compact market was the result of the comparatively weak improvements in fuel economy they offered and the consumers' anticipation of the new, more fuel efficient, front-wheel drive compacts introduced in April, 1979, by General Motors.

The tight crude oil supply and subsequent increase in spot prices was caused by the cutback of Iranian production following the country's revolution. The net annual result to the U.S. was a 2 percent shortage of imported crude oil, but it produced a 12 percent shortage of gasoline in the second quarter of 1979. A combination of industry, government, and consumer actions combined to magnify the effects of this gasoline shortage. Consumers responded by continuing to substitute smaller, more fuel efficient cars or delaying purchase of larger cars until their fuel economy had improved. In the second quarter, sales totalled 2.9 million units as imports' share climbed to 23.1 percent of the market. Subcompacts maintained their share of over 17 percent, and compacts increased their share by 3.6 percentage points. The increase in the compacts' share reflects the consumers' positive reception of the new GM models introduced in April. Conversely, full size and luxury models fell a combined 4.8 percentage points. By the end of the second quarter, inventories of the larger vehicles had risen so high that production cutbacks were necessary.

As the energy situation worsened in the second quarter, the industry suffered an additional setback caused by the Teamster strike-lockout. The production loss to domestic manufacturers was approximately 150,000 units, much of which was not recovered following the strike, as inventories of large cars remained high.

The third quarter ended with an aggressive marketing campaign designed to clear out the unwanted inventories of the larger 1979 model cars. Reduced production, including some shutdowns of large car manufacturing facilities and a delay in the introduction of the 1980 models, curtailed domestic production. The year end clearance effort produced sales of over 2.6 million units in the quarter, but this success may have been at the expense of the 1980 models as such sales incentives usually pull the market forward. Of the total sales in the third quarter, 22.5 percent were imports while domestic subcompacts dipped to 14.7 percent of the market as supplies remained scarce.

The introduction of the 1980 models in the fourth quarter of 1979 brought a fresh supply of domestic small cars to the market. The market share of sub-compacts increased by 1.3 percentage points and compacts increased 0.4 percentage points, as the imports' share declined by one percentage point. The significant shift to small cars that occurred during 1979 is vividly illustrated when the market shares of the fourth quarter of 1979 are compared with those of a year ago.

For example, in the fourth quarter of 1978, luxury cars had 6.1 percent of the market, full size models had 20.5 percent, and intermediate models 26.3 percent, for 52.9 percent of the total. For the same period in 1979, luxury models accounted for 5.5 percent of the market, full size cars fell to 15.2 percent, and intermediate models to 22.2 percent, or 42.9 percent of the total. With the exception of the new GM compacts, the products in both years were similar, so that the overall shift to smaller, more fuel efficient vehicles can be interpreted as a direct result of increased gasoline prices and fears of future shortages in supplies of fuel.

Trucks

In the first quarter of 1979, the pace of truck sales remained healthy. The light truck market continued to benefit from the change in demand that began in the 1970s as consumers preferred vans, general utility, and other light trucks, both of the two- and four-wheel drive variety, to meet their recreation and utility needs. As passenger cars were equipped with smaller engines, light trucks offered an alternative, albeit more expensive, vehicle with the desired operating capacity. The sales of medium- and heavy-duty trucks continued to benefit from the economic expansion as business replaced and expanded its fleets.

First quarter sales were only off slightly from the previous year, and total sales were still above the one million unit level. Among individual categories, however, the sales of imported light trucks increased while other categories declined. By the second quarter, this shift became more pronounced as buyers of light trucks sought to meet their needs with imported, light utility vehicles. Sales of these vehicles in the second quarter were up over 22 percent from the first quarter, but they were not strong enough to offset the effects of the energy crisis. Total sales declined by 5 percent.

In the third quarter, domestic light truck sales declined by 21 percent from 1978, and import sales decreased as well because supplies were scarce. Truck buyers delayed replacing their existing vehicles as uncertainty about future gasoline prices and availability clouded their decisions. A weakening economy also suppressed demand in this market, which is linked to recreation spending. Similarly, medium- and heavy-duty truck sales declined in the third quarter as a result of the economic slowdown.

The introduction of the 1980 models did not offer any impetus to reverse the declining trend of truck sales. In the fourth quarter, domestic light truck sales totalled only about 400,000 units, a 53 percent drop from the previous year's fourth quarter. By contrast, imported truck sales increased from year earlier levels by 15.6 percent to 107,900 units. By the fourth quarter, the imports' share of this market had grown to 17.2 percent compared with 10.9 percent in the first quarter.

TABLE 23
U.S. Motor Vehicle Production and Sales, 1977-1980
(Millions)

	Calendar Years				Model Year
	1977	1978	1979	1980[1]	1980
Production	12.699	12.896	11.472	10.700	10.200
Passenger Cars	9.211	9.174	8.441	7.920	7.600
Trucks	3.488	3.722	3.031	2.780	2.600
Sales	14.914	15.550	14.137	13.190	12.750
Passenger Car	11.168	11.301	10.658	10.040	9.750
Domestic	9.104	9.308	8.328	8.140	7.800
Import	2.064	1.993	2.330	1.900	1.950
Trucks	3.746	4.249	3.479	3.150	3.000
Domestic	3.489	3.913	3.010	2.700	2.550
Imports	.257	.336	.469	.450	.450

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1. Estimate.

Source: *Ward's Automotive Reports,* Ward's Communications, Inc., selected issues.

1980 Outlook

Although sales did decline from the previous year's highs, the cumulative rate of expansion during recent years represented a recovery from the severely depressed sales of the 1974-75 recession. Previously, the long-term rate of growth was approximately 3 percent, and this year's decline can be seen as a return to that trend.

Recent evidence, however, suggests that a structural change occurred following the earlier energy crisis and that the long-term rate of growth has fallen to below 2 percent. Unfortunately, the pace of sales in 1980 will not be governed by the rate of long-term growth but rather by the cyclical factors in the economy. These factors can be expected to push growth below the trend once again as economic activity slows and real purchasing power continues to fall.

The outlook for 1980 is predicated on the national economic forecast, presented earlier, that depicts a significant decline for the year. By the end of the fourth quarter, however, the economy is expected to recover, and the anticipated fiscal stimulus will benefit sales in the 1981 model year.

Thus, for 1980, passenger car sales will decline to 9.7 million units. Imports will maintain at least a 20 percent share of the market. The market mix is again expected to favor the smaller cars, which are expected to capture 55 percent of the total. Truck sales are forecast to decline to a total of 3.15 million units, a 9.5 percent decline from the previous year. The import share of the truck market is expected to average 13 percent as light-truck buyers continue to demand these popular fuel efficient utility vehicles.

Domestic car manufacturers are expected to produce 7.9 million units, a decline of 6.2 percent from last year. Domestic truck production is forecast to total 2.7 million units, a decline of 10.6 percent from 1979.

In summary, motor vehicle sales in 1980 are expected to total 13.2 million units, down 6.7 percent from 1979. Domestic production of motor vehicles is predicted to be 10.7 million units, a decline of nearly 6.7 percent. While 1980 will be a lackluster year, improving economic conditions and new fuel efficient products from domestic manufacturers should make 1981 much brighter.

ENERGY

1979 Developments

Energy supplies remained adequate to meet the needs of Michigan's residents throughout 1979, but consumption patterns shifted as many factors affected the state and national economy. These factors, including price increases and supply fluctuations, resulted from events in foreign petroleum markets.

In June, 1979, the price of Saudi Arabian oil was $18 per barrel. When the Organization of Petroleum Exporting Countries (OPEC) met in Caracas in December, the Saudis increased the price of light crude, which OPEC uses as its benchmark, to $24. Libya and Iran then began charging up to $30 per barrel, and Egypt responded with a $40 per barrel price. This leapfrogging of oil prices, more than any other factor, caused the high energy prices paid by consumers in 1979.

More than 41 percent of Michigan's crude oil is from foreign sources, and, of that amount, nearly two-thirds is from OPEC countries. Thus, Michigan's consumers are especially vulnerable to price increases. In Michigan, total fuel and utility prices in 1979 increased 11.2 percent over 1978, as measured by the Detroit Consumer Price Index. Fuel oil and coal prices increased 38.6 percent for the period, and gas and electric prices increased 12.2 percent.

In response to these political and technical issues, Congress passed legislation giving the President authority to impose gasoline rationing and to establish mandatory or voluntary targets for any fuel type on a state-by-state basis. These provisions of the Energy Emergency Conservation Act were supplemented by Michigan legislation giving the Governor authority to declare an energy emergency and to impose mandatory reduction measures during a 90-day emergency period.

Below is a summary of key developments in energy markets for 1979.

Natural Gas

Natural gas prices in 1979 continued their upward spiral and, together with state-approved rate hikes, caused significant increases in utility bills. Consumers Power customers paid an average of $537 a year for natural gas (based on December, 1979, data) compared with only $456 in 1978. Most of this 17.7 percent increase was directly attributable to increased fuel costs to the utility, as rate hikes accounted for less than one-quarter of the increase. Bills for Michigan

Consolidated customers rose by just over $100 on an annual basis in 1979 to $539. Fuel costs to the company increased 39 percent for the year.

Although approximately three-quarters of the natural gas used in the state is from the interstate pipeline network, Michigan's large storage capacity assured an ample supply of natural gas. Residential demand for natural gas grew toward the end of 1979 as consumers shifted away from higher priced fuel oil, but, industrial demand diminished. Thus, fuel substitution, in concert with increased conservation, resulted in a net reduction in actual consumption, as shown in Table 24.

In September, 1979, the Marysville synthetic natural gas plant was shut down because it was not needed to meet gas requirements during the year. Should it be needed again, up to two years would be required to reactivate the plant, which is capable of producing 18 percent of Consumers Power Company's gas supply.

Fuel Oil

In early 1979, the U.S. Department of Energy asked refiners to develop fuel oil inventories of 240 million barrels by October, about 20 million barrels above the primary inventory levels for 1978. This goal was met, but at the expense of gasoline production.

Fuel substitution resulted in a reduction of fuel oil consumption in some areas. In northern Michigan, for example, many individuals converted to wood-burning heating systems as the price of fuel oil rose and the long distance to gas mains made natural gas inaccessible or too costly. In combination, this reduced consumption, plus the Department of Energy's policy, kept home heating fuel supplies adequate throughout 1979.

Fuel oil prices in early 1980 reached a state-wide average of 90 cents per gallon, compared with 40 cents per gallon early last year.

Electricity

Electricity sales increased moderately in 1979, and electric prices rose at the general rate of inflation. Because half of all electricity sales are to the commercial and industrial sectors of the economy, aggregate electricity sales are closely tied to general economic activity. Toward the end of the year as the economy began to turn downward and production slowed, electricity sales dropped. Improved weather in 1979 also reduced the demand for electricity. The growth that did occur came from the addition of residential customers.

Coal

The majority of Michigan's electric power, 70 percent, is generated from coal-fired burners, whereas only 15 percent is generated by nuclear plants. In the first half of 1979, 28.8 million tons of coal were shipped to the state, compared with 27.6 million tons for the same period in 1978. Coal supplies remained sufficient throughout the year.

TABLE 24
Energy Sales and Customers in Michigan, 1978 and 1979[1]
(Millions)[2]

	1978	1979[3]	Percent Change 1978-79
Electric Companies:			
Electric Power Sales (Kilowatt-hours)	63,507.5	63,688.4	0.3
Generating Capacity (Kilowatt-hours)	15.5	15.0	-3.2
Net Plant Investment	$ 7,325.2	$ 8,252.8	12.7
Customers (Thousands)	3,018.4	3,071.5	1.8
Gas Companies:			
Gas Energy Sales (Cubic feet)	819,471.9	781,149.0	-4.7
Estimated Reserves (Cubic feet)	1,700,000.0	1,700,000.0	--
Net Plant Investment	$ 1,610.1	$ 1,784.1	10.8
Customers (Thousands)	2,084.9	2,131.6	2.2
Telephone Companies:			
Total Telephones (Thousands)	6,769.6	7,017.7	3.7
Net Plant Investment (Thousands)	$ 3,907.5	$ 4,266.3	9.2

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1. Figures are based on Michigan's two largest electric providers (Consumers Power Company and Detroit Edison Company), the state's two largest gas service providers (Michigan Consolidated Gas and Consumers Power Company), and Michigan's two largest suppliers of telephone service (Michigan Bell Telephone Company and General Telephone Company of Michigan).
2. Unless otherwise indicated.
3. Estimate.

Source: Michigan Department of Commerce, Public Service Commission.

TABLE 21
Labor Force and Unemployment Rates in Selected States, 1978 and 1979

(Thousands)

State	October 1978		October 1979[1]		Percent Change in Labor Force	Percentage Point Change in Unemployment Rate
	Labor Force	Unemployment Rate	Labor Force	Unemployment Rate		
United States	101,622.4	5.3	104,197.9	5.5	2.5	0.2
MICHIGAN	4,193.1	5.5	4,343.0	7.2	3.6	1.7
Ohio	5,105.2	4.7	5,121.8	5.9	0.3	1.2
Illinois	5,406.5	5.3	5,416.4	5.5	0.2	0.2
Indiana	2,583.6	4.9	2,616.0	6.6	1.3	1.7
Wisconsin	2,337.6	4.1	2,414.4	3.9	3.3	-0.2
Pennsylvania	5,324.6	6.9	5,363.9	7.9	0.7	1.0
New York	7,882.7	7.9	7,952.0	7.1	0.9	-0.8
Florida	3,731.3	7.0	3,820.4	6.5	2.3	-0.5
California	10,706.8	5.9	11,067.1	5.0	3.4	-0.1
Texas	6,067.4	4.3	6,263.9	3.8	3.2	-0.5

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1. Preliminary.

Source: *Employment and Earnings,* U.S. Department of Labor, Bureau of Labor Statistics December, 1979. *News,* U.S. Department of Labor, Bureau of Labor Statistics, October, 1979.

TABLE 22
Quarterly 1979 U.S. Motor Vehicle Sales by Product Type
(Thousands)

	I		II		III		IV		1979	
	Units	Percent of Total	Units	Percent of Total	Units	Percent of Total	Units	Percent of Total	Units	Percent of Total
Passenger Cars										
Subcompact	485.5	17.7	513.4	17.5	378.9	14.7	384.2	16.0	1,762.0	16.5
Compact	431.6	15.8	569.7	19.4	478.6	18.6	456.3	19.0	1,936.2	18.2
Intermediate	600.7	21.9	604.9	20.6	597.3	23.2	531.6	22.2	2,334.5	21.9
Full Size	494.8	18.1	432.9	14.7	410.6	16.0	364.5	15.2	1,702.8	16.0
Passenger Van	31.2	1.1	32.3	1.0	25.4	1.0	13.7	0.6	102.6	1.0
Luxury	140.8	5.1	108.3	3.7	103.2	4.0	131.6	5.5	483.9	4.5
Import	554.3	20.2	680.5	23.1	579.0	22.5	515.7	21.5	2,329.5	21.9
TOTAL	2,738.9	100.0	2,942.0	100.0	2,573.0	100.0	2,397.6	100.0	10,651.5	100.0
Trucks										
Light	832.1	80.8	732.7	75.1	671.0	79.0	399.5	64.0	2,635.3	75.7
Medium	37.6	3.7	42.9	4.4	33.1	3.9	38.0	6.1	151.6	4.4
Heavy	47.7	4.6	62.8	6.4	34.0	4.0	78.8	12.6	223.3	6.4
Import	112.6	10.9	137.4	14.1	111.5	13.1	107.9	17.2	469.4	13.5
TOTAL	1,030.0	100.0	975.8	100.0	849.7	100.0	624.1	100.0	3,479.6	100.0

Source: *Ward's Automotive Reports*, Ward's Communications, Inc., selected issues.

Automobile Gasoline

Gasoline consumption in 1979 declined to 4.8 billion gallons from the 1978 level of 5 billion gallons due to a number of factors. The trucking industry strike-lockout caused severe problems in southwest Michigan and led to supply shortages in June. At that time, the average allocation to retail gasoline stations was the lowest since the 1974 oil embargo. Nevertheless, Michigan was able to avoid the problems faced by other states through good management and efforts to reduce unnecessary consumption. OPEC price increases and the reduction in petroleum imports caused further supply restrictions and restrained demand.

The average price of unleaded gasoline in Michigan was $1.18 at the end of 1979, 53.7 percent above the prior year's level.

1980 Outlook

The outlook for 1980 is uncertain. While Saudi Arabian oil production is expected to continue at the rate of 9.5 million barrels per day through the first quarter of 1980, it may not remain at this level later in the year. Other OPEC countries will reduce production early in the year, but no problem in meeting domestic needs is anticipated unless a major political upheaval occurs in Iran or elsewhere in the Middle East. As the conservation ethic becomes stronger, domestic energy consumers will rely less on imported oil.

Early in 1980, Congress is expected to take action on the windfall profits tax legislation and synthetic fuel program, both of which are outgrowths of the President's initiatives in 1979. The legislation is not expected to affect the domestic energy situation directly until late 1980 or early 1981, however. The continuation of domestic decontrol of oil will add nearly one percentage point to the basic inflation rate, and higher OPEC prices will add another one-half to three-quarters of a percentage point to the Consumer Price Index.

Natural gas prices are expected to increase 18 percent in 1980. State and federal regulations will help restrain the increase, while higher Canadian import prices will tend to build pressure to increase natural gas prices in Michigan. By November, 1980, incremental pricing will be imposed under federal law, and gas prices for non-exempt industrial customers will increase.

Fuel oil and coal prices combined are expected to increase more than 38 percent in 1980, and electricity prices are expected to increase almost 17 percent. To help consumers face these increased costs, several home heating assistance programs will provide approximately $89 million in federal aid and $34 million in state money to eligible claimants. Tax credits and grants will be provided to Michigan residential energy customers on the basis of income level and other factors.

The increase in coal prices in 1980 will result, in part, from increased demand prompted by fuel substitution. As an increasing number of firms switch to coal, the increase in consumption could be significant, especially if the development of nuclear power slows and thereby requires that utilities increase the number of coal-fired burners. Offsetting the possibility of increased coal consumption is the concern about its environmental effects that may decrease usage.

Increased foreign crude oil prices and higher domestic prices resulting from the decontrol of oil will contribute to continually rising gasoline prices in 1980. As the state's economy slows, gasoline demand will continue to diminish, but this trend will be partially offset by an increase in gasoline production, resulting from federal changes in allowable lead content levels.

In sum, 1980 will be a year of challenge as consumers attempt to meet rising energy costs and reduce unneccessary demand, while foreign events continue to influence the direction of the domestic economy.

TABLE 25
Regulated Public Utility Revenues, 1978 and 1979[1]
(Thousands)

	1978	1979[2]	Percent Change 1978-79
Electric Revenues:			
Residential Sales	849,258	$ 898,173	5.8
Commercial Sales	580,492	633,086	9.1
Industrial Sales	996,977	1,060,554	6.4
Other Sales (Incl. Resale)	179,958	192,826	7.2
Total	$2,606,686	$2,784,639	6.8
Gas Revenues:			
Residential Sales	$ 778,038	$ 915,574	17.7
Commercial Sales	406,785	430,772	5.9
Industrial Sales	526,124	580,362	10.2
Other Sales (Incl. Resale)	109,491	47,678	-56.5
Total	$1,820,437	$1,974,386	8.5
Telephone Revenues:			
Local Services	$ 876,746	$ 939,691	7.2
Tolls	722,962	808,379	11.8
Other	80,672	118,103	46.4
Total	$1,680,380	$1,866,180	11.1

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[1] These figures are based on Michigan's two largest electric providers (Consumers Power Company and Detroit Edison Company) and the state's two largest gas service providers (Michigan Consolidated Gas and Consumers Power Company), and Michigan's two largest suppliers of telephone service (Michigan Bell Telephone Company and General Telephone Company of Michigan). These companies account for approximately 92% of the total electric service delivered in Michigan, about 90% of the gas service, and nearly 95% of the telephone service.

[2] Estimate.

Source: Michigan Department of Commerce, Public Service Commission.

FINANCE

1979 Developments

When the monetary history of the 1970s is written, 1979 may be noted as the year the Federal Reserve Board (Fed) finally made a firm commitment to exorcise inflation from the economy. The Fed has made previous attempts to slow inflation, but has never exhibited the resolve to stick with these policies for the time required to achieve results. There is now reason to believe that Chairman Volcker may have the resolve to stick with these policies, although he will be under considerable pressure to ease up as unemployment rises in 1980. The Fed will also be under pressure to accommodate the large increases in oil prices in 1980, as these increases are basically an external tax on the economy as opposed to internally generated inflation. In addition, the new Fed policy of placing more emphasis on controlling bank reserves and less on interest rates should prove to be a more effective means of controlling monetary growth. Previously the Fed had been reluctant to let interest rates rise to the levels needed to slow down the demand for credit. Borrowers were perfectly willing to pay 11 to 12 percent for money when inflation was running at a 12 to 13 percent rate, but the current rates of 15 to 17 percent for bank loans are having a restraining effect.

The first year of the 1980s could be a watershed for monetary policy and the economy, as the actions of the Federal Reserve Board in 1980 will play a major role in shaping the direction of economic growth for the early years of the decade. The failure to take advantage of current opportunities to slow inflation will likely result in a continuation of double digit inflation for several years and will make inflation difficult to control in the future.

Monetary Policy

During 1979, as in 1978, Federal Reserve Board actions were directed largely at slowing the growth in the monetary aggregates to a level more consistent with reasonable price stability. In action directed particularly at inflation, the Federal Reserve Board moved in October to tighten its control of the money supply.

As in 1978, the money supply (M_1) was tightly controlled in the first quarter and actually declined 1.3 percent, at an annual rate (see Table 26). This slow growth was due, in part, to weak economic activity and to the shifting of funds from demand deposits into both savings accounts accessed by automatic transfers (ATS) and negotiable order of withdrawal accounts (NOW) in New York State, which reduced the

TABLE 26

U.S. Money Stock, 1978 and 1979[1]

(Annual Percentage Rates of Change, Seasonally Adjusted)

	M_1	M_2	Monetary Base
1978			
I	6.8	7.0	9.9
II	9.2	8.4	7.9
III	7.9	9.7	9.5
IV	4.1	7.6	9.8
Annual Average	7.8	8.6	9.4
1979			
I	-1.3	2.8	5.6
II	8.0	8.8	5.8
III	9.9	11.9	10.7
IV	4.9	8.9	9.4
Annual Average	5.2	8.0	8.2

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1. Money stock is displayed here in three components: M_1 — currency plus demand deposits; M_2 — M_1 plus bank time and savings deposits other than large negotiable CDs; and monetary base — total reserves, currency in circulation, and vault cash of nonmember banks.

Source: *Economic Indicators*, Council of Economic Advisors, November, 1979; *Macroeconomic Forecasts: 1979*, Chase Econometric Associates, Inc., 1979.

growth of M_1 an estimated 2.8 percentage points. The discount rate* remained at 9 1/2 percent in the first quarter, and the federal funds rate was stable at about 10 percent.

The growth in the money supply picked up sharply in the second quarter and rose 8 percent at an annual rate as the demand for transaction balances strengthened. This increase followed two quarters when M_1 growth was well below the rate consistent with the historical relationships among money, gross national product, and interest rates. In addition, the diversion of funds from demand deposits into ATS and NOW accounts reduced M_1 growth an estimated 1.5 percentage points, only about half the reduction in the first quarter.

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*The rate at which member banks borrow from the Federal Reserve System.

With growth in the monetary aggregates accelerating in an environment of exceptionally rapid inflation and the continued high use of both labor and capital resources, the Federal Reserve maintained restraint in providing reserves to the banking system. The discount rate was increased from 9 1/2 percent to 10 percent in late July, and the federal funds rate increased one-half of a percentage point during the second quarter.

Monetary growth accelerated in the third quarter, as M_1 increased at an annual rate of 9.9 percent. As in the second quarter, the transfer of funds to ATS and NOW accounts are estimated to have reduced M_1 growth, but at a lower rate. M_1 fell about three-fourths of a percentage point in the third quarter compared with 1 1/2 percentage points in the second quarter.

In an effort to moderate the rapid growth of monetary aggregates in an environment of intense inflationary pressures, the Federal Reserve allowed the rate on federal funds to increase about 1 1/4 percentage points over the quarter. The discount rate was also increased one-half of a percentage point each month in the quarter and thus rose to a record 11 percent. Despite rapidly rising interest rates, business loans continued to accelerate. Corporate managers, when expecting a cyclical downturn accompanied by lower interest rates, attempt to avoid incurring long-term debts while rates remain high. Hence, a heavy reliance on short- and intermediate-term financing is not unusual when economic activity begins to weaken.

As the fourth quarter began, the Federal Reserve Board was greatly concerned about the continued high rate of inflation, the failure of high interest rates to slow the demand for credit, the growth in the monetary aggregates, and continued weakness in the U.S. dollar.* Consequently, the Board adopted new restrictive actions on October 6.

First, the discount rate was increased one percentage point to 12 percent. Second, a reserve requirement of 8 percent was established against net increases in managed liabilities, defined as certificates of deposit (CDs) of $100,000 or more with maturities of less than one year, Eurodollar borrowings, security repurchase agreements and federal funds borrowed from nonmember institutions. This requirement applied to large member banks, and similar requirements were imposed on branches and agencies of foreign banks. (They have amounted to less than one percent of total required reserves of member banks, however.) Finally, the Federal Open Market Committee announced its intention to alter its operating techniques to achieve its stated objective for monetary growth. Controlling the supply of bank reserves would replace the former emphasis on targeting the federal funds rate.

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*The index of weighted average exchange value of the U.S. dollar against currencies of 11 other major countries fell from 105.57 in 1976 to 92.39 in 1978, and continued to decline to 86.73 in October, 1979. The dollar rallied moderately in the fourth quarter, however, following the announcement of the Fed's new policies.

The effect of these new policies was almost immediate. The money supply (M_1) declined sharply in October and increased at an annual rate of less than 5 percent during the final quarter. The growth in business loans slowed sharply in the fourth quarter, after increasing almost 20 percent in the first three quarters (see Table 27). The federal funds rate jumped from 12 to 15 1/2 percent in early November, but dropped to about 13 3/4 percent by year's end. All other interest rates also rose precipitously.

The primary factor in the slowdown of credit demand in the fourth quarter was the reduction in inventory building by business. The high cost of borrowing, which approached 20 percent for most borrowers, was also a strong incentive to cut back borrowing.

For all of 1979, the money supply increased 5.2 percent, well below the 7.8 percent increase recorded in 1978.

TABLE 27
Business Loans at Commercial Banks
(Annual Percentage Rates of Change, Seasonally Adjusted)

Period	1978	1979
I	15.3	20.4
II	16.9	16.4
III	14.3	20.3
IV	14.6	10.7
Annual Average	14.7	18.1

Source: *Federal Reserve Bulletin*, Federal Reserve System, Board of Governors, selected issues, 1979.

Interest Rates

Short-term interest rates increased at a faster rate in 1979 than in any other year in this century. After increasing sharply in late 1978, short-term rates were basically stable during the first quarter of 1979. Three-month treasury bill rates for the first quarter averaged 9.36 percent, more than 3 percentage points above the 1978 average.

In the second quarter, weakness in economic activity led investors to expect that credit would ease, and short-term rates thus declined. Short-term rates began to rise sharply in the third quarter as economic activity strengthened, the demand for credit accelerated, and the Fed became more restrictive. Three-month treasury bill rates peaked at about 12 1/2 percent in October, and commercial paper and 90-day CD rates topped 15 percent after the Fed announced its new restrictive policies; they did decline in November, however. Most short-term rates declined in November and then increased moderately in December. At year's end, three-month treasury bill rates were 12 percent compared with an average of about 9 percent as the year began and about 6 percent at the beginning of 1978 (see Table 28).

The discount rate was increased four times in 1979 from 9 1/2 percent to 12 percent following a record of seven increases in 1978. The prime rate was increased 12 times in 1979, after 13 increases in 1978, to a record 15 3/4 percent before declining to 15 1/4 percent at the end of the year.

Long-term interest rates followed the same basic pattern as short-term rates. Triple A corporate bond rates were stable at about 9 1/4 percent until September, rose to about 10 3/4 percent in early November, and were stable for the last two months of the year.

TABLE 28
Market Interest Rates, 1978 and 1979
(Percent)

	3-Month Treasury Bills	High-Grade Municipal Bonds	Corporate Aaa Bonds (new issues)	Prime Comm. Paper 4-6 Mos.	New Home Mortgage Yields
1978					
I	6.41	5.53	8.61	6.80	9.20
II	6.48	5.94	8.84	7.20	9.38
III	7.32	6.03	8.81	8.08	9.67
IV	8.68	6.10	9.18	9.90	9.91
Average	7.22	5.90	8.86	7.99	9.54
1979					
I	9.36	6.20	9.54	10.10	10.23
II	9.37	6.08	9.48	9.85	10.50
III	9.63	6.18	9.47	10.60	11.07
IV[1]	11.80	7.09	10.93	13.10	11.41
Average	10.04	6.39	9.85	10.91	10.77

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[1] Preliminary

Source: *Economic Indicators,* Council of Economic Advisors, November, 1979; *Macroeconomic Forecasts: 1979,* Chase Econometrics Associates, Inc., December, 1979, and January, 1980.

Municipal bond rates followed the same pattern, beginning the year at about 6.5 percent and ending the year at 7.25 percent. The increase in long-term rates can be attributed primarily to expectations of higher rates of inflation and strong credit demands.

As in 1978, the average effective rates on conventional home mortgages increased in every month in 1979, from 10.2 percent in January to about 11.5 percent in December. These figures understate the actual increase in mortgage rates as they lag commitments by two to three months. For example, the average rate in Michigan as of November, 1979, was 14 percent based on commitments at the 21 largest savings and loan associations for conventional, single family, new home mortgages with a 75 percent loan-to-price ratio.

Savings Flow

The growth in time and savings deposits (including certificates of deposit) at U.S. financial institutions slowed significantly in 1979. The annual increase of only 9.4 percent, compared with 12 percent in 1978 (see Table 29), was due mainly to the slower growth in personal income, the decline in the saving rate as people attempted to maintain their standard of living in the face of accelerating inflation, and the large flow of funds into money market funds. Nevertheless, the outflow of funds from financial institutions that normally occurs when short-term interest rates rise rapidly was stemmed by the availability of money market certificates (MMCs).* Funds invested in MMCs increased by $54.9 million, at annual rates, to $131.5 billion in the first quarter and continued to increase at a rapid pace throughout the remainder of the year. These certificates accounted for 10 percent of small denomination time and savings deposits at commercial banks and more than 15 percent of the deposits at thrift institutions. Effective March 15, regulations governing MMCs were changed and reduced their attractiveness, particularly to customers of thrift institutions.** As a result, the overall growth in MMCs slowed slightly in the last three quarters of the year, but especially at thrift institutions.

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*These certificates are available with a six-month maturity and a maximum maturity of eight years with the ceiling rate on the shorter-term maturity tied to six-month treasury bill rates. These new certificates were established in June, 1978, to allow depository institutions subject to interest rate ceilings greater flexibility in attracting funds.

**These new restrictions prohibited the compounding of interest on MMCs, and the one-fourth percentage point difference on MMCs (between thrift institutions and commercial banks) was eliminated when the treasury bill rate was above 9 percent.

TABLE 29
U.S. Financial Deposits, 1978 and 1979
(Annual Percentage Rates of Change)

	Consumer Time Deposits	Thrift Deposits	Certificates of Deposit	Savings Deposits at Commercial Banks
1978				
I	7.2	9.7	47.7	2.0
II	7.9	8.5	33.5	3.8
III	11.0	11.1	12.2	2.9
IV	11.5	11.6	25.0	0.2
Annual Average	9.3	11.6	33.3	1.5
1979				
I	5.8	8.8	19.9	-9.6
II	9.3	6.8	-41.0	-3.1
III	13.3	8.4	-17.7	5.5
IV	11.6	6.3	33.9	N.A.
Annual Average	10.0	9.3	7.2	N.A.

Source: *Macroeconomic Forecasts: 1979*, Chase Econometrics Associates, Inc., December, 1979; *Federal Reserve Bulletin*, Federal Reserve System, Board of Governors, selected issues, 1979..

The growth of regular savings deposits, which slowed sharply in 1978, was actually negative in the first half of 1979 as savers discovered the more attractive alternatives available to them. On July 1, the maximum interest payable on savings deposits was increased one-fourth of a percentage point, but increases in short-term rates were well in excess of this adjustment. In the third quarter, however, the outflow of funds from saving deposits was stemmed as savings deposits at commercial banks increased 5.5 percent at an annual rate.

Total savings inflows at thrift institutions increased 9.3 percent in 1979, well below the 11.6 percent rate of 1978, but comparable with the growth of all deposits in 1979.

The growth in certificates of deposit, which increased 33.3 percent in 1978 and 19.9 percent at an annual rate in the first quarter of 1979, slowed dramatically in the middle two quarters of the year, as money market funds and certificates grew in popularity. CDs recovered in the fourth quarter, however, and their growth rate accelerated.

Savings deposits in Michigan's institutions also slowed in 1979, for the same reasons discussed above, and increased only 9 percent compared with an 11.1 percent increase in 1978. The slowdown was more pronounced in Michigan than at the national level as Michigan personal income weakened more than U.S. personal income. Time and savings deposits increased 9 percent above the 1978 level at savings and loan (thrift) institutions, 9.2 percent at credit unions, and 9 percent at commercial banks. (See Table 30.)

TABLE 30
Michigan Institutional Savings Market, 1974-1979
(Billions)

	1974	1975	1976	1977	1978	1979
Commercial Banks[1]	$15.4	$16.3	$17.8	$19.2	$21.2	$23.1[2]
Savings and Loan Associations	7.3	8.6	10.2	11.8	13.2	14.4
Credit Unions	2.1	2.3	2.4	2.8	3.2	3.5
TOTAL	24.8	27.3	30.4	33.8	37.6	41.0

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1. Figures are for individual, partnership, and corporate deposits at Federal Reserve member banks.

2. Estimated.

Source: Michigan Credit Union League; Research Department, Federal Reserve Bank of Chicago; Federal Home Loan Bank of Indianapolis.

1980 Outlook

The Federal Reserve Board can be expected to control monetary growth tightly during the first half of 1980. As unemployment rises and inflation abates later in the year, monetary policy is likely to become less restrictive. The money stock (M_1) is expected to increase about 6 percent in 1980 compared with 5.2 percent in 1979. The majority of the growth will occur in the second half of the year, as the annual increase during the first half is expected to be only 3 to 4 percent. The weak demand for credit as the economy enters a recession will also contribute to this slow rate of growth.

Most interest rates will reach their peak in the first quarter of 1980 and are expected to decline thereafter as the weakness in the economy weakens the demand for credit and slows the rate of inflation. The discount rate is expected to fall to 8 percent by year's end, and three-month treasury bill rates are expected to decline to 9 1/4 percent by the fourth quarter. The prime rate is forecast to drop to 12.5 percent by midyear and 10.5 to 11 percent by the end of the year. The largest decline in rates is expected to occur in the second quarter of 1980. The decline in long-term rates will be more moderate, but will still be significant. Triple A corporate bond rates are projected to fall from about 11 1/2 percent at the beginning of 1980 to about 10 1/2 percent by year end. Conventional 30-year mortgage rates will continue to rise in the early months of the year and will peak at 12 to 12.5 percent, and will then drop to 11 to 11.5 percent in the final quarter of 1980.

These forecasts, of course, depend largely on a slowdown in the rate of economic growth and a moderation in the rate of inflation to about 9 to 10 percent. If economic growth is stronger than expected and the rate of inflation fails to slow, the decline in interest rates will be much less pronounced.

The growth in U.S. and Michigan disposable income is expected to slow dramatically in 1980, particularly in Michigan, and will decline in real terms. The savings rate is expected to increase only moderately, despite the historically low level reached in 1979. As a result, the growth in both U.S. and Michigan time and savings deposits is expected to slow sharply in 1980. However, the decline in market interest rates will help financial institutions retain some funds that might otherwise be invested in money market funds and money market certificates. U.S. time and savings deposits are expected to increase 7.5 to 8 percent in 1980, while Michigan deposits will increase only 5 to 6 percent, as personal income grows more slowly in the state than nationally.

CONSTRUCTION

1979 Developments

After three years of growth, the pace of construction expenditures nationwide slowed in 1979 and, in real terms, actually declined. The high costs of financing new projects, limited availability of mortgage money, soaring construction costs, and the weakened economy limited construction activity during the year. Expenditures for total new construction rose 7.9 percent to $222.5 billion in 1979; however, after adjusting for inflation, expenditures declined 4.4 percent from 1978 levels. Most of the increase in construction spending occurred in the private sector, which was up 9.9 percent compared with the 0.9 percent increase in outlays for public construction.

The small increase in private residential construction, only 4.4 percent, reflected the downturn in housing in 1979. Although a deep slump was forestalled, total housing starts did decline 13.9 percent, from 2.02 million units in 1978, to 1.74 million units in 1979. Consumers' desires to "buy-in-advance of inflation" and the availability of mortgage funds created by the introduction of money market certificates held up the demand for housing for most of the year,

TABLE 31
U.S. New Construction Expenditures, 1977-1979
(Millions)

Type of Construction	1977	1978	1979[1]	Percent Change 1978-1979
Total New Construction	$174,400	$206,224	$222,500	7.9
Private Construction	135,826	160,403	176,250	9.9
Residential Building	80,956	93,425	97,500	4.4
Nonresidential Building	28,695	36,293	45,450	25.2
Public Construction	38,174	45,821	46,250	0.9

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1. Estimate.

Source: *Construction Review,* U.S. Department of Commerce, Industry and Trade Administration, November, 1979.

despite record high interest rates and average new home prices of $72,000. In October, however, the Federal Reserve Board announced strict new monetary policies designed to curb inflation. As a result, the cost of credit increased and higher mortgage rates, 11.65 percent by year's end, resulted. In response, housing starts in November and December dropped to a seasonally adjusted annual rate of 1.52 million units from the strong September level of 1.91 million units.

Nonresidential construction spending increased 25.2 percent in 1979. This strong growth resulted from the relatively high rates of capacity utilization in most industries in 1978 and strong corporate cash flows that encouraged capital investment.

Public construction, 20 percent of all construction outlays, rose by less than $500 million in 1979. The growth in 1978, spurred by federal emergency public works funds, leveled off during 1979, and some sectors, including hospitals and water supply facilities, suffered declines.

Michigan's construction industry reflected the nationwide slowdown. Residential building permits issued within the state declined 19.3 percent from 1978 to 48,083 units in 1979. Permits for single family

TABLE 32
Michigan Residential Building Permits, 1972-1979

Year	Single Family Units[1]	Multi-Family Units[1]	Total	Percent Change
1972	41,054	35,543	76,597	
1973	35,784	35,474	71,258	-7.0
1974	26,481	17,810	44,291	-37.8
1975	26,653	10,237	36,890	-16.7
1976	32,331	13,564	45,895	24.4
1977	41,314	17,370	58,684	27.9
1978	42,350	17,265	59,615	1.6
1979[2]	33,577	14,506	48,083	-19.3

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1. A housing unit is a single room or group of rooms intended for occupancy as separate living quarters by a family, by a group of unrelated persons living together, or by a person living alone.

2. Preliminary.

Source: *Construction Review*, U.S. Department of Commerce, Industry and Trade Administration, November, 1979.

units decreased 21 percent, as the average effective mortgage rate with a 25 percent down payment climbed to 14.2 percent on houses by December. Multi-family units declined 16 percent.

The value of construction awards in Michigan for 1979 totaled $5.2 billion, 13.3 percent below 1978 awards. (See Table 33.) Non-residential construction barely kept pace with the general rate of inflation, and all other sectors declined. Residential construction awards declined 2.8 percent, and public works and utilities awards dropped 51 percent.

TABLE 33
Annual Construction Contract Awards in Michigan, 1961-1979
(Thousands)

Year	Non-residential	Residential	Total Building	Public Works and Utilities	Total Construction
1961	$ 476,406	$ 499,822	$ 976,228	$ 325,264	$1,301,492
1962	465,567	541,802	1,007,369	346,143	1,353,512
1963	558,207	658,930	1,217,137	267,038	1,484,175
1964	788,533	741,977	1,530,510	317,401	1,848,411
1965	766,258	1,038,356	1,814,614	465,073	2,279,686
1966	930,000	835,030	1,765,100	333,200	2,098,330
1967	946,513	1,020,000	1,966,513	357,000	2,323,513
1968	912,849	1,029,581	1,942,430	407,537	2,349,967
1969	962,697	891,531	1,854,228	874,715	2,728,943
1970	955,592	942,760	1,898,352	1,052,245	2,950,597
1971	874,058	1,319,978	2,194,036	840,719	3,034,755
1972	1,010,891	1,596,633	2,607,524	842,780	3,450,304
1973	1,206,481	1,856,354	3,062,835	1,299,276	4,362,111
1974	1,355,623	1,314,147	2,669,770	791,628	3,461,398
1975	951,139	1,089,145	2,040,284	1,146,796	3,187,080
1976	1,111,835	1,481,164	2,592,999	592,738	3,185,737
1977	1,525,733	2,144,489	3,670,222	604,463	4,274,685
1978	1,752,267	2,469,130	4,221,397	1,821,304	6,042,701
1979	1,945,482	2,399,418	4,344,900	892,825	5,237,725

Source: F. W. Dodge Division of McGraw-Hill Information Systems Company, special release.

In Michigan, contract construction employment has increased since the recession year low of 106,300 recorded in 1975. The 1979 increase, to 143,000, occurred despite the slowdown in construction activity and demonstrated that productivity (output per worker) in the construction industry declined. Although nominal average weekly earnings have increased from $306.62 in 1973 (the best year for construction in recent years) to $446.59 in 1979, real average weekly earnings have fallen from $277.80 in 1973 to $204.11 in 1979. Thus, construction workers' earnings have not kept pace with inflation.

1980 Outlook

The outlook for 1980 is for a continued decline in construction activity, and virtually no growth in the value of total new construction will occur. Housing starts are forecast to drop nationally from 1.74 million units in 1979 to 1.45 million in 1980, as federal credit tightening actions suppress the demand for mortgages. Without strict monetary policies, the demand for housing would continue to increase since consumers view home ownership as a hedge against inflation and since a new generation of home buyers is now entering the market. Thus, an underlying demand for housing is building up in the economy just as the housing industry is slumping. This underlying demand for housing will keep demand for mortgage money high, meaning that mortgage rates will continue to rise relative to other interest rates. This pent-up demand could also lead to a stunning round of housing price increases after the 1980 housing slump passes. Nonresidential and public construction will grow more slowly in 1980 than in 1979, although these sectors will not be as weak as the residential market.

The Michigan construction industry will also be weak in 1980. Building permits are expected to decline 11.5 percent to 44,000 during 1980. Employment in the construction industry should drop slightly to 141,000, a 1.6 percent decline, but wage and salary payments are forecast to rise one percent, to $2.8 billion.

AGRICULTURE

1979 Developments

Farmers' gross income in Michigan rose 13.6 percent over the 1978 level, as both crop and livestock receipts advanced during 1979. Crop receipts, which made up an estimated 52.8 percent of total receipts in 1979, increased by 13.1 percent, and both the value and production of field crops and vegetables increased. Livestock receipts rose an estimated 14.2 percent over 1978 and constituted 47.2 percent of the total. Receipts from livestock were affected by the large supply of pork and the relatively small supply of beef. Net farm income improved as did overall farm assets. Although farmers' financial position improved the ratio between farm receipts and farm costs turned unfavorable in the last months of 1979.

In general, farm prices moved upward during 1979, although the index measuring prices received by Michigan farmers increased less than the national index. Prices received by Michigan farmers for crops and livestock combined moved up 11.1 percent compared with 14.8 percent nationally. At the same time, the index of prices paid by farmers, which measures the costs of such supplies as feeds, fuel, seeds, and fertilizer, rose 13.6 percent nationally in 1979. This difference suggests that some additional cost pressures were present despite a year of generally rising prices and production for agricultural commodities in Michigan.

Michigan field crop production expanded in 1979. Winter wheat production set a record in both per acre and total production and was up strongly over last year's yield. Michigan corn production exceeded the 1977 record by 20 percent because of record per acre yields. Michigan soybean production set a record because the number of acres planted increased. Production also increased for onions, summer vegetables, and dry beans in 1979, while potato production fell 6 percent.

Fruit production did not fare as well in 1979 as in 1978, and fell 24 percent because of adverse weather conditions. Early spring freezes hampered cherry, peach, and plum production while a September drought curtailed apple production. The Michigan decline in tart cherries caused a drop in production nationally, as Michigan is the leading producer.

Despite higher production levels, the prices of the major crops produced in Michigan increased because strong export demand enlarged the market. As a result, the price of corn, Michigan's most important crop, increased 16.1 percent above the 1978 level. Wheat prices recorded the strongest advance of the major crops by increasing

TABLE 34
Michigan Cash Receipts from Farm Marketing, 1978-79

(Millions)

	Livestock and Products		Crops		Total	
Period	1978	1979	1978	1979	1978	1979
January	$ 76.4	$ 96.0	$ 77.1	$ 79.4	$ 153.5	$ 175.5
February	77.7	92.4	72.9	53.5	150.6	145.9
March	83.5	101.0	72.9	79.4	156.4	180.5
April	84.6	112.0	43.6	80.9	128.2	192.8
May	89.5	100.4	75.4	65.7	164.9	166.1
June	88.5	97.3	67.6	92.5	156.1	189.7
July	80.7	90.8	125.1	131.2	205.8	222.0
August	82.7	91.6	90.1	136.8	172.8	228.4
September	80.2	86.7	99.7	128.0	179.9	214.7
October	84.8	93.5	134.5	134.5	219.4	228.0
November[1]	84.4	93.0	156.2	172.1	240.6	265.1
December[1]	84.7	84.7	114.1	122.9	198.8	207.6
Total	$997.7	$1,139.4	$1,129.1	$1,276.9	$2,126.8	$2,416.3

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1. Estimate

Source: U.S. Department of Agriculture, Economics, Statistics, & Cooperatives Service.

20 percent, from $3.01 per bushel in 1978 to $3.61 in 1979. Prices for oats, soybeans, and potatoes also increased over 1978 levels, although the average price for dry beans fell.

Livestock production was mixed in 1979. The number of hogs slaughtered approached record rates in 1979 when high pork prices early in the year induced farmers to increase pork production. The number of cattle marketed fell in 1979 as farmers withheld cattle from the market in order to rebuild their herds. Michigan milk production was higher than the 1978 average despite a decline in the number of milk cows.

As livestock production varied in 1979, so did livestock prices. Hog prices dropped sharply due to the large increase in marketings. From October, 1978, to October, 1979, hog prices plummeted $17.10 per hundredweight, or 32.9 percent. On the other hand, the tight supply of cattle and calves drove beef prices up a sharp 32.3 percent. Milk, a major source of income for Michigan agriculture, rose 15.2 percent in price in 1979.

TABLE 35
Prices Received by Michigan Farmers, 1979
(15th of Month)

	Corn Per Bu.	Wheat Per Bu.	Oats Per Bu.	Dry Beans Per Cwt.	Soy-beans Per Bu.	Potatoes Per Cwt.	All Hay Baled Per Ton
Jan.	$2.13	$3.51	$1.31	$13.20	$6.48	$4.65	$45.50
Mar.	2.18	3.20	1.33	14.00	7.07	5.00	43.50
April	2.25	3.14	1.34	14.70	7.04	5.15	47.00
May	2.36	3.23	1.37	15.40	7.01	5.10	47.00
June	2.58	3.85	1.45	16.50	7.18	5.10	43.50
July	2.67	3.81	1.37	19.90	7.02	7.18	33.50
Aug.	2.63	3.86	1.32	19.10	7.07	4.51	33.50
Sept.	2.56	3.86	1.30	17.80	6.67	3.56	33.50
Oct.	2.46	3.83	1.34	18.10	6.33	3.75	36.00
Nov.	2.26	3.75	1.33	17.50	6.25	4.35	39.00
Dec.[1]	2.33	3.83	1.48	18.30	6.14	4.60	41.50
Average Market Year	$2.38	$3.61	$1.36	$16.48	$6.77	$4.82	$40.83

Month	Hogs Per Cwt.	Beef Cattle Per Cwt.	Calves Per Cwt.	Lambs Per Cwt.	Milk Whole-Sale Per Cwt.	Eggs Per Doz.	Wood Per Pound	Turkeys Per Pound
Jan.	$51.60	$56.10	$80.00	$72.50	$11.90	$.51	$.68	$.54
Feb.	54.00	59.60	91.90	70.40	11.90	.53	.68	.51
Mar.	50.30	63.10	95.40	66.30	12.00	.56	.68	.50
April	45.40	67.50	103.00	71.70	11.90	.53	.68	.46
May	44.80	66.80	109.50	73.90	11.70	.47	.68	.47
June	41.10	61.70	104.50	68.10	11.60	.50	.70	.44
July	39.90	58.30	98.20	62.90	11.40	.48	.70	.43
Aug.	36.80	55.40	92.10	56.30	11.70	.45	.67	.42
Sept.	38.80	59.50	92.80	63.30	12.10	.45	.67	.40
Oct.	34.80	58.40	87.80	64.60	12.50	.45	.68	.42
Nov.	36.60	58.60	87.20	63.80	13.10	.51	.68	.49
Dec.[1]	39.90	58.50	87.10	64.10	13.10	.56	.68	.45
Average Calendar Year	$42.88	$60.29	$94.12	$66.49	$12.08	$.50	$.68	$.46

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1. Preliminary

Source: *Agriculture Across Michigan*, U.S. Department of Agriculture and Michigan Department of Agriculture, Michigan Agricultural Reporting Service, selected issues, 1979.

1980 Outlook

The overall outlook for Michigan farm income and prices for 1980 is not optimistic. The embargo of 17 million metric tons of grain exports to the Soviet Union introduces considerable uncertainty into the grain market. Although arrangements for purchase of this grain by the U.S. government are being made, the surplus will loom over the market and depress prices. Increased exports to other countries and increased domestic demand will ease, but will not eliminate, this problem. The plan to convert the surplus into ethanol for gasohol cannot be carried out in one year because no production capacity now exists. Over several years, with adequate capacity and with a subsidy, gasohol could become a factor in supporting higher grain prices, but such support will not be available in the near future. Therefore, grain prices should decline slightly in 1980.

Livestock prices in 1980 will also decline. The near record pork production in 1979 will continue, and hog prices will remain depressed, at least through midyear. The price of chicken is expected to decline slightly as the supply increases during the first half of the year. The competition from low hog and chicken prices will restrain beef prices in 1980 as will increased production later in the year. Declining real personal income will reduce consumers' demand for beef in 1980 and create additional downward pressure on beef prices. Adequate milk supplies should restrain price increases during 1980.

Fruit prices will increase in 1980 because of increased costs of harvest, transportation, and canning.

Prices received by Michigan farmers are expected to decline slightly in 1980, while the cost of farm inputs, particularly fuel, fertilizers, and labor will continue to advance. With costs rising and prices falling, farm income is expected to rise only 3 percent in 1980. Even this small rise will depend on slightly lower feed grain prices combined with a reasonably good year for fruits and vegetables plus near constant overall agricultural production.

Although farm prices and income will not improve sharply, the increased transportation, labor, and energy costs, will cause retail prices of food items to continue to rise in 1980, but at a slightly slower pace than in 1979. Therefore, the price of food for home consumption is likely to advance approximately 8 percent, compared with 11 percent in 1979.

MINERAL SUPPLIES AND MINING

1979 Developments

In 1979, the value of mining production in Michigan rose $374.4 million—49.3 percent above the level of 1977 and 19.1 percent above the level of 1978. Increases in value accounted for most of this difference as changes in production were relatively minor, especially for nonmetallic minerals.

Both the value and production of mineral fuels, oil, and gas rose in 1979. The decontrol of domestic oil began to increase the value of Michigan oil production during the latter part of 1979. Generally tight supplies in world markets drove prices for decontrolled Michigan oil (primarily from stripper wells) to unprecedented levels, exceeding world contract prices for oil.* Increasing production as well as price increases of approximately 54 percent also raised the value of natural gas production. As a result, the value of mineral fuels rose from 30 percent of the total value of Michigan mineral production in 1978 to 38 percent in 1979.

Metallic minerals also gained in value but changes in production were modest. Speculative activity in the gold market spilled over into other commodity markets and raised the price of silver and copper, but this activity had only minor effects on Michigan production.

The closing of the Mather B Iron Mine in July, 1979, brought to an end the era of underground iron mining in Michigan. Expansion at the Tilden Iron Mine more than offset the loss in capacity from the closing of the Mather Mine, however, and iron ore remains Michigan's most important metallic mineral by far.

While direct mining employment averaged only 11,800 and mining produced only about 0.42 percent of personal income in 1979, the importance of mineral resources to the Michigan economy is much greater. Durable goods industries depend heavily on a variety of metallic and nonmetallic minerals, especially iron and steel. The construction industry is the largest, but by no means only, user of nonmetallic minerals. Mineral fuels are used by all sectors of industry and commerce, but especially by transportation and utilities. Indeed, one-third of all wage and salary employment in Michigan is in industries directly using mineral resources. These industries produce about 37 percent of the total private sector business activity in Michigan (as measured by value added by production).

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*World contract prices are prices charged in major contractual sales by oil-exporting countries, as opposed to spot market prices.

The location of commercially usable mineral deposits in Michigan helps the state maintain its industrial base, but the state also depends on imports as well. Although supplies of many of these minerals are less crucial than adequate supplies of fuel minerals, many of these metals are essential to machinery production and are helpful in producing lighter, more fuel efficient vehicles. Both recycling and the substitution of other materials are possible, but Michigan nonetheless requires that these and other metallic minerals remain available so that industrial growth can continue.

During 1979, supply shortages at the national level and price increases for both fuel and metallic minerals contributed to higher business costs and to increased inflation. Metals and metal product prices advanced 13.7 percent, slightly above the general inflation rate, while fuels rose 53.4 percent. The metals markets were plagued by many problems in 1979, including poor profitability in the steel industry, production problems in the aluminum industry, and speculation in the silver, copper, and platinum markets.

1980 Outlook

During 1980, continued increases in the price of fuel minerals seems assured. The decontrol of oil prices will continue and will raise the price of Michigan oil. In addition, increases of approximately 90 percent in world oil prices during 1979 raised the price ceiling for Michigan oil. Crude oil prices world-wide will not advance as rapidly in the coming year as they did in 1979, because stocks are adequate and economic activity is slowing in several industrial nations. Contract prices for imported oil will not decline and may even advance moderately. Prices of Michigan oil could advance by about $7 per barrel in 1980 as we approach decontrol on October 1, 1981. Natural gas prices will rise more slowly than oil prices, but they tend to rise concurrently, as the two fuels are substitutes in many applications.

Natural gas production can be expected to increase as it has during recent years, as prices rise and existing reserves are developed. Increases in oil production will be very modest, however, because the Niagaran Reefs are becoming fully developed. Over time, increases in oil production will depend on the development of new fields.

The oil industry will face higher taxes in 1980. The severance tax on oil was increased from 2 percent to 6.6 percent and to 4 percent on marginal and stripper wells. A considerable federal severance tax, referred to as the "windfall profits tax," also seems certain. Despite these actions, considerable additional revenue will be available to the oil industry at current prices. Some controversy exists, however, as to whether this additional revenue is sufficient to encourage exploration both nationally and in the state.

The outlook for metallic mineral prices is not favorable to producers. The slowdown of production in the automobile industry is already affecting the steel industry and, to a lesser extent, the construction industry as well. This situation is expected to continue well into 1980, and should make price increases for iron ore difficult to achieve even though cost pressures will continue. Unless the situation becomes worse than expected, production should be maintained or will drop only slightly. Increases in production for 1980 are unlikely under existing economic conditions, although capacity in the industry did expand to about 21.6 million tons.

Copper prices and production present a more complex situation in which lower industrial production has weakened demand but commodity speculation has moved prices upward. This speculation stems from people's desire to hold real assets, and it poses a problem for producers. While it increases prices in the short run, it encourages the substitution of other materials in industrial markets and thus weakens long-run industrial demand. Michigan copper production should remain stable during the coming year unless current high price levels are maintained. If prices remain high, production could increase as much as 50 percent. Moreover, if copper production rises, silver production would probably rise as well.

Construction activity is expected to soften during 1980. The decline in housing starts, which began in 1979, is expected to extend into 1980. High interest rates in early 1980, as well as weakening business activity, will slow private, non-residential construction. The result will be lower demand for many nonmetallic minerals including sand and gravel, stone, cement, and gypsum, and the production of these minerals will probably decline. Cost increases from fuel, environmental requirements, and other sources will not be fully recovered, and the overall value of nonmetallic minerals should change little.

TRANSPORTATION

1979 Developments

In 1979, the worsening energy crisis helped emphasize the importance of developing and maintaining a broad transportation system. This need, coupled with legislation* that reorganized the financing structure of transportation and increased the flexibility with which Michigan can respond to changing transportation demands, helped Michigan's transportation system expand responsibly in 1979.

Highways

The completion of a number of highway projects during 1979 brought the total of Michigan's state highways, county roads, and municipal streets to 116,500 miles. Michigan's 1,181-mile segment of the national interstate freeway system surpassed the 95 percent completion mark in 1979 with the opening of the 10-mile east section of I-696 through southern Macomb County. Another major freeway, the final 12-mile section of M-14 in Wayne and Washtenaw Counties, which connects the M-14 freeway east of Ann Arbor with the interchange of I-96 and I-275 at Plymouth, was also opened in 1979. The first segment of a 27.6-mile addition to U.S. 31, which will connect with I-94 east of Benton Harbor, opened in 1979 with the completion of a 3.5-mile segment of U.S. 31 from the Indiana border north to U.S. 12 near Niles. Finally, ground was broken in late 1979 for a high level bridge to replace the existing drawbridge across the Saginaw River at Zilwaukee on I-75.

Aviation

Aviation activity continued to increase in Michigan during 1979. Of the four traditional barometers of aviation activity, the number of airline passengers and registered general aviation aircraft increased, while the number of control tower operations and amount of airline cargo declined slightly.

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*A series of bills, called the "transportation package," reorganized the previously separate funds into the Michigan Transportation Fund. Under their provisions, money is allocated according to percentages set by law to county road commissions, cities, and villages for local road needs and to the new State Transportation Department Fund. Money from this fund is then distributed to the State Trunkline Fund for state highway needs and to the Comprehensive Transportation Fund for public transportation needs throughout the state.

Passengers using Michigan's airports reached a record total of 14 million people in 1979, up 8.8 percent from the 12.8 million passengers in 1978. Passengers at the Detroit Metropolitan Wayne County Airport increased 11 percent and accounted for 76 percent of all passenger traffic in the state. The number of registered general aviation aircraft increased by 1.3 percent, from 6,513 in 1978, to 6,600 in 1979, but the rate was less than the 2.4 percent gain recorded in 1978.

The number of control tower operations decreased 1.4 percent in 1979, primarily because the rising cost of aviation fuel caused the periodic cancellation of some scheduled flights and reduced the number of flights by private aircraft. The slowdown in business activity in 1979 led to a 1.6 percent decline in cargo transported by air.

Rail Freight

Federal and state funding programs, including the state acquisition of portions of the Ann Arbor Railroad, have saved 841 miles of Michigan railroad service that would have been terminated almost four years ago when the Penn Central and Ann Arbor Railroads went bankrupt. Agreements made then committed the Michigan Department of Transportation to operating, improving, and maintaining this railroad network, and, in 1979, up to 75 miles of track on these subsidized rail lines were resurfaced. The state is also assisting the bankrupt Chicago, Milwaukee, St. Paul, and Pacific Railroad in rehabilitating over 93 miles of rail lines in the Upper Peninsula. Because many Michigan companies depend on rail freight services, this entire subsidy program provides important assistance to Michigan's economy.

Inter-city Passenger Programs

State supported inter-city passenger travel includes railroads and bus programs, and these operations continued to expand in 1979. The average number of daily riders on the state supported AMTRAK train between Detroit/Dearborn and Jackson has more than doubled in the last five years, and has increased substantially on AMTRAK trains operating between Detroit and Chicago and between Port Huron and Chicago. Track and train signal improvements have reduced the travel time on these routes, and modern rail passenger equipment has been introduced on all Michigan trains to increase the attractiveness of this mode of travel. The state has also helped establish new inter-modal transportation centers, which are designed to accomodate passengers for trains, inter-city buses, local buses, taxis, and airport shuttle services, in Kalamazoo and Dowagiac. Financial aid to inter-city bus systems is also provided through this program.

TABLE 36
Mineral Production in Michigan, 1978 and 1979[1]

		1978			1979[2]	
Mineral	Quantity	Value (in millions)	Percent of Total Value	Quantity	Value (in millions)	Percent of Total Value
Metallic						
Copper: recoverable content of ores, etc. (short tons)	38	$ 51.0		40,000	$ 81.8	
Iron Ore: (useable), gross weight (thousand long tons)	17,538	557.0		16,768	590.0	
Silver: recoverable content of ores, etc. (thousand troy ounces)	354	1.9		479	5.1	
Value Metallics		$ 609.9	31.2		$ 676.9	29.0
Fuels[3]						
Petroleum (thousand 42-gallon barrels)	34,667	$ 427.9		35,428	$ 614.2	
Natural Gas (million cubic feet)	150,535	166.9		161,708	270.6	
Value Fuels		$ 594.8	30.3		$ 884.8	37.9
Nonmetallics Other Than Fuels						
Cement						
Masonry (thousand short tons)	294	$ 13.6		237	$ 12.6	
Portland (thousand short tons)	5,916	211.8		5,003	206.0	
Clay (thousand short tons)	2,122	7.0		2,112	7.4	
Gem Stones	NA	.01		NA	.01	
Gypsum (thousand short tons)	2,765	15.5		2,600	18.3	
Lime (thousand short tons)	1,291	45.8		1,018	42.3	
Peat (thousand short tons)	220	3.9		275	5.5	
Natural Brines (Bromine, Calcium Chloride, Iodine, and Magnesium)		169.5		NA	169.3	
Salt (thousand short tons)	3,741	83.9		3,249	86.2	
Sand and Gravel (thousand short tons)	48,260	107.6		50,500	125.0	
Stone						
Dimension (thousand short tons)	8	.2		8	.2	
Crushed (thousand short tons)	40,680	94.4		37,343	97.7	
Value Nonmetallics		$ 753.1	38.5		$ 770.6	33.0
TOTAL		$1,957.8			$2,332.2	

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1. Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
2. Estimates
3. Data provided by Michigan Department of Natural Resources.

Source: U.S. Department of Interior, U.S. Bureau of Mines, except mineral fuels as noted; 1979 estimates from Michigan Department of Natural Resources assisted by the U.S. Bureau of Mines.

Intra-city Public Transportation

Bus systems in large metropolitan areas, small communities, and rural areas benefited from state assistance in 1979. Recently passed legislation provided additional funds for the development and improvement of needed public transportation throughout the state. Ridership on Michigan's 12 metropolitan area systems increased 400,000 to 109.3 million in FY79. Dial-A-Ride transportation systems carried more than 3.2 million passengers in FY79, up from 2.8 million in FY78.

Ridesharing

New state initiatives to promote carpools, vanpools, and public transportation services occurred in 1979. Following the recommendation of the Governor's Task Force on Energy Conservation Alternatives that ridesharing programs be instituted to conserve gasoline, the Legislature appropriated $500,000 to support local ridesharing programs. At the start of 1979, six companies were operating programs, but at year's end 15 companies operated ridesharing programs. The number of vanpools doubled, from 175 to 350, and the program for state employees grew from 48 to 83 vans during the year. Approximately 900 state employees are now participating in this program.

1980 Outlook

In 1980, gasoline consumption is expected to decline and the fleet of autos registered in Michigan is expected to become lighter. As a result, gasoline and weight tax revenues will diminish and the growth of state revenues that support transportation programs will be tempered in 1980. Because the costs of transportation programs are expected to continue to climb, alternative forms of transportation financing must be explored so that a broad, long-term base can be developed to allow revenue growth to keep pace with costs.

In 1980, a number of state highway projects are scheduled to be completed or begun. The final 6.2-mile section of I-475, serving Flint from I-75, is scheduled to be completed. Work is scheduled to begin in 1980 on the mid-section of I-69 north of Lansing. Other major highway projects going under contract in 1980 include work on U.S. 131 between M-46, near Howard City, on the existing freeway south of Cadillac, and on M-21 west of Port Huron to Lapeer.

All aspects of airline activity in Michigan are expected to diminish in 1980 as both real income and business activity decline. Another problem facing aviation in Michigan during 1980 is the announced intention of United Airlines to reduce service at Detroit, Flint, Grand Rapids, Lansing, and Saginaw. The Department of Transportation is currently studying this plan to ensure that adequate replacement services are provided to these communities. On the brighter side, Sabena Belgian World Airlines will provide regular air service between Detroit and Brussels beginning April 1, 1980.

TOURISM

1979 Developments

Tourism activity in Michigan declined moderately from 1978 to 1979 as gasoline shortages and rapid price increases caused many potential travelers to cancel trips or remain closer to home.

State park attendance fell throughout the state but the decline was not uniform across all regions of the state. In the Upper Peninsula, attendance fell by nearly 20 percent, and the number of Mackinac Bridge crossings fell by more than 10 percent. In the southern Lower Peninsula, by contrast, state park attendance decreased by only 3.4 percent (See Table 37). Overall, attendance at state parks declined 8.3 percent for the year.

TABLE 37
Michigan Tourism Indicators, 1977-1979

	1977	1978	1979	Percent Change 1978-79
Mackinac Bridge Crossings[1]	2,280,000	2,438,000	2,190,000	-10.2
State Park Attendance[2]				
Region I (U.P.)	1,225,000	1,190,000	953,500	-19.9
Region II (Northern L.P.)	2,677,000	2,661,900	2,477,200	-6.9
Region III (Southern L.P.)	1,998,500	2,005,000	1,937,350	-3.4
State Total[3]	5,900,300	5,857,010	5,368,080	-8.3
Number of Delegates at Major Convention Facilities	743,600	1,075,088	1,143,350	6.3

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1. Data for 1978 and 1979 are for January-November.
2. Data for 1978 and 1979 are for January-October.
3. Detail may not sum to total because of rounding.

Source: Michigan Department of Commerce, Travel Bureau.

The volume of highway travel declined in the Upper Peninsula for the second straight year. Following a 2.3 percent reduction in 1978, it fell by 10 percent in the first 10 months of 1979 compared with the same period in 1978.

In a positive development, the number of delegates staying at major convention facilities has grown rapidly in recent years. Part of this increase may reflect a shift from sites in other states to those in Michigan as well as an expanded capacity of facilities in the state.

1980 Outlook

Both the diminishing growth rate of Michigan personal income and rapid increases in gasoline prices will have adverse effects on Michigan's tourist trade in 1980. Hence, in the near future, tourist related businesses in Michigan may experience less prosperous times, especially in the Upper Peninsula. On the other hand, the selection of Detroit as the site of the 1980 Republican National Convention should provide a welcome increase in activity in the city.

INTERNATIONAL TRADE

1979 Developments

International trade improved in 1979, although U.S. imports still exceeded exports. The first and third quarter current account balances (merchandise trade plus profit remittances on foreign investments and other services) showed a surplus in 1979 and registered the best performance since the fourth quarter of 1976. Although the current account balance recorded a deficit of $13.5 billion in 1978, preliminary figures for 1979 indicate that the deficit will be only $2 billion. A strong export performance and large earnings from investments made abroad account for this improvement.

Exports through the third quarter of 1979 were up $28.8 billion, or 28.1 percent, over exports through the third quarter of 1978, as the depreciation of the dollar in 1977 and 1978 made the price of U.S. goods more competitive. In addition, the increased strength of the Japanese and European economies, relative to the U.S. economy, enabled those countries to import a relatively greater volume of U.S. merchandise in 1979. Despite these substantial gains, however, increasingly large oil import bills, $39 billion in 1978 and $60 billion in 1979, continued to drain the U.S. economy and offset the strong export performance. Consequently, the U.S. merchandise balance of trade registered a deficit of $28 billion, according to preliminary figures for 1979, compared with a 1978 deficit of $33.8 billion.

Michigan is one of the nation's largest exporters of manufactured goods, and its largest export sector is the auto industry. Most of Michigan's auto exports go to Canada, with whom trade is conducted under the U.S. Automotive Agreement. This agreement creates a customs union for U.S. and Canadian automobile, truck, and parts manufacturers and allows parts and cars to flow across the border duty-free. To date, the Canadians have exported more finished vehicles, both trucks and automobiles, while the U.S. has exported a greater volume of parts and components.

Total trade under this agreement rose from $21.5 billion in 1978 to an estimated $24 billion in 1979, up 11.6 percent. (See Table 38.) The U.S. surplus under the agreement totaled an estimated $544 million.

Agricultural exports are a growing part of the state's economy, and totaled nearly $500 million in 1979. Michigan's leading export commodity was feed grains, which accounted for about 37 percent of total agricultural exports, while soybeans and soybean products accounted for 16 percent. Wheat and vegetable products were also important export items, as each constituted 14 percent of the total. Other commodities important to the state's export market include fruits, hides, dairy products, lard, and tallow.

TABLE 38
Trade Under the U.S. Automotive Agreement with Canada, 1978 and 1979

	1978			1979[1]		
	U.S. Exports	U.S. Imports	Balance	U.S. Exports	U.S. Imports	Balance
Cars	$ 2,613	$ 4,129	$ -1,516	$ 2,975	$ 4,430	$ -1,455
Trucks	1,158	2,036	-878	1,649	2,320	-671
Parts	7,080	4,160	2,920	7,541	4,785	2,756
Tires and Tubes	113	167	-54	129	215	-86
TOTAL	$10,964	$10,492	$ 472	$12,294	$11,750	$ 544

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1. Estimates

Source: U.S. Department of Commerce

In 1979, Michigan attracted foreign investment in 14 new plants that provided employment for 765 workers. Michigan now has over 94 foreign firms operating in the state.

1980 Outlook

The 1979 export boom will continue into 1980 as the 1978 depreciation of the dollar and the 1979 and 1980 reversals of growth rates between the U.S. and European economies make our goods more price competitive and increase the relative purchasing power of our major trading partners. Continued export strength, reduced imports due to the weak U.S. economy, and large investment earnings should result in a modest current account surplus in 1980. By contrast, the anticipated $80 billion cost to import oil in 1980 should produce a deficit of about $23 billion in the merchandise balance of trade in 1980.

Michigan's export business should remain strong in 1980, as benefits accrue from the modest tariff reductions negotiated at the recently completed Tokyo round of trade negotiations held by 99 countries. Motor vehicle exports should remain prominent, although exports to Canada may diminish as Canada's production of vehicles and parts increases. Strong sales of Michigan's agricultural exports will continue in 1980, and Michigan should attract another 20 to 22 foreign firms employing 1,000 new workers. In all, Michigan's export business should continue to grow in 1980.

APPENDIX A

INTERGOVERNMENTAL ISSUES

IMPLEMENTATION OF THE TAX LIMITATION AMENDMENT

On November 7, 1978, Michigan voters approved ballot Proposal E, the tax limitation amendment, by a 52 to 48 percent margin; 45 days later, on December 22, 1978, it became a part of the Michigan Constitution. Proposal E substantially amended Article IX of the State Constitution, which deals with finance and taxation, by adding 10 new sections and amending an existing section. This amendment has had and will continue to have a significant effect on the fiscal policies of state and local government. The major actions taken to date to implement certain sections of this constitutional amendment and an analysis of their fiscal impact on state and local government are described below.

Section 26

This section establishes a limit on total state revenues and prohibits the Legislature from imposing taxes that would exceed this limit. The revenue limit is derived by dividing total FY79 state revenues (less federal aid) by calendar year 1977 Michigan personal income (MPI).

The preliminary state revenue limit is 10.08 percent. In the current fiscal year, total state revenues are estimated to be $568 million below this limit, and, under the present tax structure, are projected to remain well below the limit in coming fiscal years. (See Table A-1.)

Section 29

This section is commonly known as the "state mandates" section, and its implementing legislation was by far the most controversial of all the measures enacted. Public Act 101 of 1979 rather narrowly defines some of the important terms used in Section 29, including activity, service, necessary cost, state requirement, state agency, existing law, and others. It thus excludes various state actions from coverage under its provisions. The Act requires the Legislature to appropriate annually sufficient funds to make disbursements to each local unit for the necessary costs of state requirements not otherwise excluded.

Act 101 requires the Department of Management and Budget, which is responsible for administering the Act, to compile and submit to the Legislature a report of existing state mandates. The Legislature, in

TABLE A-1
Calculation of State Revenue Limit
(Millions)

Calendar Year	Michigan Personal Income (MPI)	Applicable Fiscal Year	Total State Revenues (TSR)	TSR/MPI (percent)	Revenue Limit[4]
1975	$ 54,589	1977	$5,337	9.78	N/A
1976	61,653	1978	6,093	9.88	N/A
1977	69,554	1979	7,008	10.08[1]	N/A
1978	77,943	1980[2]	7,289	9.35	$ 7,857
1979[2]	85,484	1981[2]	7,872	9.21	8,617
1980[2]	91,207	1982[2]	8,659	9.49	9,194
1981[2]	101,331	1983[3]	9,438	9.31	10,204

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1. This is a preliminary calculation of the tax limit ratio required by the 1978 constitutional amendment.
2. Estimate.
3. A projection of 9 percent over FY82 revenues.
4. Revenue limit = MPI x tax limit ratio (.1008).

turn, is required to adopt a concurrent resolution certifying the state financed proportion of the necessary costs of an existing activity or service required of local units by law. The Legislature is also required by the Act to establish joint House and Senate rules that provide a method of identifying state requirements in proposed legislation and of estimating necessary costs. The Act also creates a nine-member Local Government Claims Review Board to be appointed by the Governor with the advice and consent of the Senate. The Board is to advise the director of the Department of Management and Budget on the administration of the Act and to hear and decide disputed claims from local units.

Section 30

This section requires that local governments, as a group, are entitled to at least the same proportion of total state spending in future years as they received in FY79. Legislation to implement this section was adopted in July, 1979. Public Act 57 of 1979 provides that a statement of the share of the budget paid to local governments in FY79 be prepared, that this share be maintained in FY80 and future fiscal years, and that adjustments be made should the share be deficient.

The proportion of total state spending paid to all local units of government in FY79 was about 41.6 percent. This local proportion is based upon FY79 appropriations, not actual spending. When appropriation lapses are reflected in the final spending figures, this proportion is likely to increase slightly because lapses will occur mainly in state, not local, appropriations. Once the minimum proportion to local governments is reached, a $1 expenditure for a state purpose will require a 71 cent expenditure to local government in order to maintain the 41.6:58.4 ratio required. The other option would be to reduce spending for some other state activity so that the total proportion would not increase.

In the FY81 *Budget Message of the Governor,* **Governor** William Milliken stated that Section 30 has had a greater impact on the state budget than any other section of the amendment and will likely require a redirection of state priorities in the future. The Governor noted further that:

> During the eight-year period, 1971-79, the proportion of state spending for local government fell by approximately five percentage points, . . . while declining enrollments in the public elementary and secondary schools lessened pressures for state assistance. This shift amounted to nearly $400 million in FY81 budget levels. Although enrollments will likely continue their decline into the mid-eighties, needs for human services and criminal justice programs are not likely to diminish. Nonetheless, no future shift toward state programs can occur under the provisions of Section 30. As a consequence, pressures arising from competing state-wide priorities will be intensified in the years ahead, and allocation decisions will become increasingly difficult. The result will be a struggle to respond to a changing level of need within a constant share of the budget.

Section 31

This section has three provisions affecting local taxation, the most noted being the requirement that millages be reduced when the growth in the value of existing property exceeds the rate of inflation. Legislation implementing this requirement, P.A. 35 of 1979, specifies the procedures for determining and applying the millage rollback in 1979 and future years. In order to have received a millage rollback in 1979, a local unit's state equalized valuation (SEV), less new construction and improvements, must have been greater than the unit's 1978 SEV multiplied by 1.077. (The average annual growth in the U. S. Consumer Price Index was 7.7 percent between 1977 and 1978.) All local units with the authority to levy property taxes are subject to a rollback, and if warranted it is applied to the unit's maximum authorized rate. In 1979, about two-thirds of the local units in Michigan were subject to the rollback provision, which resulted in a rollback estimated at over $50 million in property taxes for all local units. Local school districts accounted for about 60 percent of this tax rollback.

In future years, P.A. 35 provides for a continuing reduction in the local tax rate if the existing tax base grows faster than the inflation rate; it also allows a "rollup" of the millage rate at the inflation rate when no rollback is required. The change in the inflation rate between 1978 and 1979 was 11.3 percent and is the level at which a rollback would occur in 1980. Table A-2 provides information on the Consumer Price Index, SEV, and property tax rates for recent years.

TABLE A-2
U.S. Consumer Price Index, State Equalized Valuations, and Property Tax Rate, 1967-1981

Calendar Year	U.S. CPI (Percent Change)	SEV (Millions)	Percent Change	Average Tax Rate (Mills)	Percent Change
1967	2.9	$29,891.3	6.0	43.11	7.7
1968	4.2	32,041.2	7.2	46.03	6.8
1969	5.4	35,101.3	9.6	47.32	2.8
1970	5.9	38,551.6	9.8	48.62	2.7
1971	4.3	41,649.0	8.0	49.54	1.9
1972	3.3	44,487.7	6.8	49.07	-0.9
1973	6.2	47,612.7	7.0	50.84	3.6
1974	11.0	51,891.3	8.9	51.08	0.5
1975	9.1	56,800.9	9.5	51.12	0.1
1976	5.8	55,478.9	-2.3[1]	53.37	4.4
1977	6.5	59,513.0	7.3	53.89	0.9
1978	7.7	64,863.9	9.0	53.73	-0.3
1979[2]	11.3	72,515.0	11.8	53.63	-0.2
1980[2]	11.1	81,217.0	12.0	53.52	-0.2
1981[2]	8.6	---	---	---	---

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[1] Beginning in 1976 inventory property was exempted from taxation. The value of this property was $4.67 billion in 1975. Excluding this property from the 1975 base, the percent change from 1975 to 1976 was 6.4 percent.

[2] Estimate.

Section 6 (as amended)

Previously, local governments under various statutes and without a vote by the people could issue bonds and other evidences of indebtedness that were secured at least partially by a pledge of full faith and credit. Section 6, as amended by Proposal E, now requires voters' approval to levy taxes outside the limits specified in Article IX for the payment of principal and interest on bonds or other evidences of indebtedness.

Several bills have been enacted to accommodate this requirement. Two bills were passed in the closing days of the 1978 legislative session to deal with immediate problems. Public Act 529 of 1978 attempted to clarify the legal status of local bonds that were in various stages of approval as of the effective date of the amendment. It provided that bond issues, approved by the governing body of a local unit before December 23, 1978, and submitted for approval to the Municipal Finance Commission by December 22, 1979, would be considered authorized prior to the effective date of Proposal E. The Attorney General recently ruled that this Act was unconstitutional and that no unlimited tax bonds can be issued after December 22, 1978, without voter approval.

The second 1978 act, P.A. 532, addressed the problem this amendment posed for county delinquent tax revolving funds. It provided procedures for counties to submit delinquent tax revolving fund notes to the voters which, if approved, would make them general obligation, unlimited tax notes. It also provided an alternative procedure by which these notes could be designated general obligation, limited tax notes.

Enacted in the summer of 1979, P.A. 83 removed the requirement that a local unit must pledge its full faith and credit to meet contractual obligations for public improvements financed under P.A. 185 of 1957. The Attorney General's Office previously held that the mandatory requirement of a full faith and credit pledge in P.A. 185 was unconstitutional under the 1978 amendment to Section 6.

Two final bills dealing with local bonding approval were enacted late in 1979. Public Act 189 established procedures for holding an election to obtain voter approval of unlimited tax pledge bonds. Public Act 190 provides authority to issue "limited tax pledge" bonds without an election if a local unit has unused tax authority in its charter or wishes to provide a primary or secondary limited tax pledge as first call on its budget to back a bond issue.

Prior to the passage of Proposal E, there was some discussion and speculation about whether the amendment would serve to increase the interest rate on local bond issues. It is still too early to give a definitive answer to this question. Nevertheless, a comparative analysis of county delinquent tax note sales in 1978 and 1979 by a bonding attorney indicated that the increase in the interest rate from 1978 to 1979 was fairly large and can only be partially explained by general market conditions.

As Table A-3 indicates, Proposal E has had an effect on the volume of local bond sales in 1978 and 1979. As might be expected, there was a large increase in bond sales, particularly general obligation bonds, in the fall of 1978 just prior to the passage and effective date of Proposal E. In 1979 the total number of bond sales was lower than in previous years but this overall reduction might be partly attributable to the effect of the large volume of 1978 sales. It is interesting to note, however, that the sales of some bonding categories, such as intermediate school districts (where there were no bond sales in 1979), community colleges, authorities and nonqualified school bonds, were very low. On the other hand, revenue bonds, which are not backed by a full faith and credit pledge and do not require voter approval, increased greatly.

TABLE A-3
Local Bond Sales in Michigan, 1977-1979

(Dollar amounts in millions)

	1977		1978		1979	
	No.	Amt.	No.	Amt.	No.	Amt.
General Obligation[1]	138	$245.1	280	$ 695.3	104	$249.3
Motor Vehicle Highway Fund	24	24.0	27	23.4	20	4.5
School						
Qualified	30	129.7	38	221.0	25	96.4
Nonqualified	10	5.0	8	11.5	2	1.1
Intermediate School District	5	3.3	18	19.9	0	---
Community College	2	4.5	11	104.5	1	6.4
Authority	22	133.0	53	174.3	6	17.1
Revenue	19	27.2	21	62.7	33	321.1
TOTAL	250	$571.8	456	$1,312.4	191	$695.9

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[1] Includes special assessment bonds with general obligation pledge.

Source: Municipal Advisory Council of Michigan

OTHER STATE - LOCAL ISSUES

Michigan's Investment Strategy

Michigan has placed strong emphasis on state-wide economic development requirements and on the specific development needs of individual communities. State funds have often been combined with federal aid in marshalling appropriate private sector and federal government commitments to community development initiatives.

We face a time when federal development assistance is being cut back, when state resources are constrained by economic uncertainty, and when economic recession threatens to compound the problems of many communities. In this situation it is imperative that state programs be carefully focused in order both to realize maximum development impact, and to address the disparate circumstances of Michigan's many communities.

Michigan must persist in its efforts to enhance the state's economy by promoting growth in manufacturing, tourism, forestry, and agriculture, as well as seizing upon opportunities in service sectors and industries of advanced technology. We must balance these essential growth initiatives with a responsible recognition that ill-conceived growth can generate its own failure. We must preserve our hope for the future by protecting our vital resources now. Development need not be, and must not be, at the expense of our vital wetlands and best agricultural lands. We cannot allow accumulated toxic materials to jeopardize our health.

The need to balance these objectives requires that the state's development strategy address many varied problems concurrently. We must continue the broad approach to development that has gained for Michigan much favorable recognition throughout the nation.

State-Local Financial Assistance

Several important issues related to state financial assistance to local general purpose units of government need to be resolved in 1980. They concern the impact of the 1980 census on local government budgets; a secondary, and probably unintended, effect of the millage rollback provision of the 1978 constitutional amendment on state revenue sharing payments; the future direction of the state revenue sharing program; and the special fiscal needs of some communities in the state.

The 1979 edition of this *Report* recognized the serious local fiscal implications of the 1980 census for units experiencing a substantial decline in population. Budgets of all local units rely to a significant degree on state revenue sharing. Services that have been funded by payments from the state based on 1970 population figures will still be required the day after the official 1980 census data are published. These service needs will not suddenly diminish if the official 1980 figures are substantially lower than those of the 1970 census. Some of a unit's state dollars, however, will be reduced. Because the state will not know the official figures for many months—perhaps even a year or more—not only will future funding for declining units diminish, but the state will also be required to make deductions from these funds as adjustments retroactive to April 1, 1980. In order to mitigate what would be an extremely adverse budgetary impact on local units with declining populations, the Governor has proposed that the new census—when the data become known—be used to make retroactive adjustments only to October 1, 1980, rather than to April 1, 1980.

Growing units would, of course, also be subject to this delay. Even so, they will receive large increases in state shared revenue when the retroactive adjustments are made for the new census. Once the new figures are published, all future payments will reflect this growth. In addition, federal law now provides for a mid-decade census that will begin in 1985, and will allow revenue sharing payments to be made more quickly and with less traumatic effect as population patterns change.

House Bill 5257, introduced in 1979, amends the State Revenue Sharing Act to provide for the six-month delay in implementing the results of the census. The bill also addresses a critical issue for those units in the state that customarily levy only one mill of local property tax but whose millage is rolled back under the provisions of the tax limitation amendment. Currently, these units could become ineligible for their usual relative tax burden and intangibles tax payments, which generally average between $1.25 and $2.50 per capita. Thus, this ineligibility could result in a sizable loss in revenue, and would occur in 1981 and every year thereafter that the local millage is rolled back below one mill. The aggregate benefits to townships under this amendment are estimated at over one million dollars in 1981.

While both of the proposed amendments to the State Revenue Sharing Act resolve specific problems, the original concept for the Act has not changed. Nine years ago, the 1971 *Economic Report of the Governor* contained an in-depth discussion of the then current method of state-local revenue sharing—straight per capita distribution. The *Report* addressed problems raised by the difference in local municipal service needs and in local tax effort and made recommendations for changes in the program to recognize these differences. These recommendations were implemented with the passage of Public Act 140 of 1971. While all units continued to receive a substantial portion of their state shared revenues on a per capita basis, local need was acknowledged by distributing some revenues on a population-weighted-by-tax-effort formula. In FY72, the first year of the program, 74 percent of the funding continued to be allocated on the per capita basis alone. By FY80, although the per capita percentage had been reduced, it still accounted for over 57 percent of the state's revenue sharing dollars.

In the year prior to passage of Act 140, $133.1 million was distributed to municipalities and $28.9 million to counties. In FY81, it is anticipated that municipalities will receive $473.1 million, and counties $70 million. One part of the increase to municipalities results from natural growth in revenues, but a second part is derived from enrichment of the program. The enrichment occurred both by adding new income sources and by allocating a greater percentage of the local government share of the state income tax receipts to municipalities. Without Act 140, including its tax effort concept, municipalities would have foregone some $85 million of the estimated $420.7 million to be distributed in the current year; and their funds would have been additionally reduced by the absence of the general fund monies that have financed the relative tax burden and guaranteed minimum provisions of the revenue sharing program.

All local units of government do not have the same service needs; all local units do not make the same local effort to provide for needs. One clear indication that different units provide different levels of funding for basic services comes from an analysis of data from a local government fiscal information questionnaire in 1978. Michigan cities, in the aggregate, spent $105 per capita for police and fire protection; villages, $27; and townships, $11. Excluding expenditures of the City of Detroit from the calculations, the data reveal city expenditures in Detroit area suburbs at $39 per capita for police and fire and in outstate central cities at $99.

By distributing some of its funds under the tax effort formula the State Revenue Sharing Act has attempted to make more equitable the ratio of state assistance to local taxes in funding local services. In 1969, prior to the passage of Act 140, townships in the aggregate received $1.10 and cities and villages received 17 cents for every tax dollar raised locally. This disparity has now narrowed somewhat, and in FY80, 89 cents in state revenue sharing went to townships and 39 cents to cities and villages for every dollar of local taxes raised. If all funds had been distributed during the current year on a per capita basis alone, however, the gap would have increased significantly with the ratio growing to $1.33 in state revenue sharing to townships for every tax dollar and decreasing to 33 cents for every dollar for cities and villages.

In his *State of the State Message* for 1980, the Governor reaffirmed his strong support for the continued utilization of the tax effort formula, and said, "To revert to a straight per capita distribution of all funds would be a retreat from current state policy to use limited resources most effectively" (p. 9).

The legislation discussed earlier for a six-month census delay will lessen but in no way eliminate the fiscal problems of units of government with declining populations. Many of these units as well as some that are growing have demographic and economic characteristics that result in service needs that cannot be funded locally. Communities, large or small, differ markedly in the severity of their problems and in their ability to address problems with local resources. The state has recognized this fact by enacting aid programs that employ formulas by which funds are distributed proportionate to need. The state has made special efforts to solve local economic crises. It makes sense to expand the scope of this approach by utilizing distress indicators to identify communities whose needs might otherwise go unrecognized, and to target state assistance to those areas of the most acute need. It would not be appropriate merely to channel all dollars mechanically according to a simple formula, but the measurement of relative distress can help assure that the benefits of state development efforts will be shared fairly throughout the state.

In his budget for Fiscal Year 1981, the Governor therefore proposed a new $40 million program as a companion to the revenue sharing program. Legislation has been introduced to target these additional funds to distressed communities according to a combination of factors that take into account the percentage of families below the poverty level, the percentage of elderly, tax base growth, tax effort, and declining population. Current projections indicate that over 300 units of government—cities, villages, and townships—would benefit from the funding provided by this program.

State Financial Assistance Table

Since 1973, this *Report* has annually included a table showing the amount of state financial assistance provided to local units of government, and an attempt to achieve comparability in programs from one year to the next has been made. This year certain changes (related to the provisions of Article IX, Section 30 of the Constitution) have been made in the table to conform with the definitions of local programs. Therefore, such items as county medical care facilities (FY78, $18.1 million), which have been defined as providing funding for services to individuals rather than to local governments, and state grants for water pollution control facilities (FY78, $34.1 million), which are derived from voter approved bonds, have not been included. Another program providing substantial funding in past years that has been excluded from the table is state funding for county general assistance programs (FY78, $82.2 million), because counties no longer have any fiscal responsibility for this state-assumed program. Even with these omissions and some other minor changes, a comparison of expenditures in FY79 to those made in the prior fiscal year to cities, villages, townships, and counties shows significant increases in state dollars flowing to local government.

APPENDIX B

SELECTED 1979 PUBLIC ACTS OF ECONOMIC SIGNIFICANCE

SELECTED PUBLIC ACTS OF 1979

Banking and Finance

Government Fund Deposits (P.A. 77, 78, 79, 84, 86, 87, 88, & 90)
Implement Proposal C, permitting state and local governments to deposit their funds in credit unions and savings and loan associations as well as in banks.

Business Development Corporation (P.A. 82)
Allows financial institutions to invest in the new Business Development Corporation.

Credit Unions (P.A. 212)
Removes statutory language requiring credit unions to pay dividends quarterly, semiannually, or annually. Credit union boards will be able to make the payments at times they choose.

Consumer Protection

Truth in Renting Act (P.A. 50)
Amends the Truth in Renting Act to establish a procedure whereby a consumer cooperative may alter a rental agreement.

Computer Fraud (P.A. 53)
Prohibits access to computers, computer systems, and computer networks for fradulent purposes and prohibits unauthorized access, alteration, or damage to equipment.

Essential Insurance Act (P.A. 145)
Makes essential auto and homeowners insurance available to all who need the coverage, and at fair rates, and defines exceptions. Guarantees car owners the right to buy insurance from the insurer of their choice unless they acquire six or more driving violation points in three years. Allows drivers who are not at fault in an accident to sue for damages up to $400 in small claims courts. Prohibits the denial of homeowners' insurance solely on the basis of the geographic location of a house ("redlining").

Home Appliances (P.A. 150)
Requires that home appliance service contracts be extended when performance of the contract is interrupted by strike or work stoppage.

Item Pricing (P.A. 193)
Eliminates the January 1, 1981, expiration date of the Item Pricing Act, which requires each consumer item to be individually priced, and imposes requirements on retailers who advertise items at specific prices.

Telegraph Companies (P.A. 219)
Includes telegraph companies among those services regulated by the Public Service Commission.

Local Government

Municipal Bonds (P.A. 5)
Sets the maximum interest rate for municipal bonds at 10 percent.

Local Economic Development (P.A. 26 and 27)
Give local units of government the flexibility to stimulate local economic growth by making provisions of the Commercial Redevelopment Act more compatible with the Downtown Development Authority Act. Under the new provisions, local units can use a combination of tax incentives and special taxes to encourage economic growth.

Millage Rollback (P.A. 35)
Implements the millage rollback provision of the 1978 tax limitation amendment. Requires a rollback of a local unit's maximum authorized millage rate when increases in the value of existing property exceed the inflation rate. Provides for a continued reduction in the local tax rate if the value of the existing tax base increases more than the inflation rate in future years. If no rollback is required, the Act allows a rollup of the millage rate equal to the inflation rate, up to the maximum authorized rate.

Bonding Requirements (P.A. 83)
Removes a mandatory requirement that a local government pledge its full faith and credit on bonds issued for certain improvements.

State Mandated Costs (P.A. 101)
Implements the state-mandated costs provision of the 1978 tax limitation amendment. Directs the Legislature to appropriate annually sufficient funds to make disbursements to each local unit to cover the costs of state-mandated programs. Defines a state-mandated cost as any new or increased service or activities of current programs mandated by the Legislature and enacted after December 22, 1978. Provides specific exemptions that would not have to be paid for by the state.

Bonding Capacity (P.A. 123)
Enables fourth-class cities to include in their total assessed valuation funds received from the single business tax, the industrial

facility tax, and the commercial facility tax, and thus restores the bonding capacity lost when the local business inventory tax was repealed.

Voter Approval (P.A. 189)
Implements another provision of the tax limitation amendment by setting a new bond election and collection procedure to be followed by public bodies empowered to levy property taxes and issue obligations.

Bonds (P.A. 190)
Clarifies the status of bonds issued by local governments. Specifies that bonds approved before the adoption of the tax limitation amendment are unlimited obligations requiring the backing of taxes outside the authorized taxing limit and that those bonds approved after the effective date of the amendment are limited obligations requiring the backing of budgeted tax revenue.

School Aid (P.A. 209)
Protects school districts from losing revenue when forced to reduce millage rates under the tax limitation amendment. Allows a district to receive an increase of at least 7.7 percent in per-pupil aid over 1978-79 levels, or use millage levied before the rollback in determining school aid. The Act is designed to protect against the loss of state aid when districts lose revenue from a millage rollback.

Tax Collections (P.A. 211)
Requires city and township treasurers to remit tax revenues collected for counties and school districts on the 1st and 15th of each month, instead of on the date when 25 percent of the tax has been collected.

Pilot Lights (P.A. 22)
Clarifies the intent of a 1978 law to ban the sale of gas appliances using pilot lights.

Energy Emergency (P.A. 38)
Gives the Governor new powers to deal with energy emergencies by permitting him to set speed limits, restrict business hours, determine the temperature levels of public buildings, direct the distribution of energy resources, and other measures.

Toxic Wastes (P.A. 64)
Imposes strict controls over the hauling and disposal of toxic and hazardous industrial wastes. Requires the licensing of firms that haul and dispose of toxic wastes and the regular inspection of disposal plants.

Toxic Waste Cleanup (P.A. 186)
Appropriates $1.6 million to clean up toxic wastes in Oakland and

Lenawee counties. Provides a $1.5 million revolving fund for the Toxic Substance Commission for loans for PBB cleanup.

Wetlands Protection (P.A. 203)

Requires a permit to do any filling, dredging, development, or draining of swamps, marshes, bogs, and other wetlands. Requires the state to compensate land owners when courts rule that a wetlands designation and restricted use constitutes confiscation of the property. Exempts some uses such as agriculture and some mine operations from the permit process.

Land Resource Inventory (P.A. 204)

Provides for a computer based resource and current use inventory of all lands. Creates an advisory committee to review inventory design and help local governments use inventories to manage resources.

State Taxation and Economic Development

Income Tax Credit (P.A. 30)

Clarifies P.A. 589 of 1978, providing a state income tax credit for taxes paid to Canada, by defining the 1978 tax year as the starting date.

Detroit Utility Tax (P.A. 34)

Extends the Detroit utility users tax until December 31, 1981. Places a $37 million cap on total collections and provides for a rate reduction if collections exceed the ceiling.

Energy Tax Credits (P.A. 41)

Extends eligibility for solar energy income tax credits and provides for a refund of any credit in excess of the tax liability during the year of application.

Employee-Owned Corporations (P.A. 44)

Provides state assistance to groups attempting to start employee-owned corporations when existing business establishments close or relocate.

Housing Development Authority (P.A. 49)

Increases the bonding limit of the Michigan State Housing Development Authority from $900 million to $1.5 billion. Allows the Authority to make housing loans to families or persons without regard to income in eligible "distressed areas." Permits loans to low-income individuals for long-term financing of newly rehabilitated or constructed housing units.

State Spending Proportions (P.A. 57)

Implements the provision of the tax limitation amendment specifying that the proportion of state spending to local government to total state spending be maintained at the Fiscal Year 1979 level.

Tax Expenditure Budget (P.A. 72)
Requires the Governor to report the amount of revenue foregone by the state each year in tax credits, exemptions, exclusions, deductions, preferential tax rates, and other tax expenditures.

Business Development Corporation (P.A. 76)
Creates a business development corporation to provide venture capital for new or expanding businesses. Credit is to be extended to the corporation from member banks and other financial institutions.

Property Tax Equalization (P.A. 114)
Requires that each classification of property be separately equalized. The state uses the equalization factor to bring assessments up to the required 50 percent of true cash value, if this is not done at the local level.

Home Heating Assistance (P.A. 126)
Provides income tax rebates based on family size and income level to provide aid for home heating costs.

Property Tax Credit Payments (P.A. 132)
Requires income tax refunds under the property tax credit provision to be issued by checks separate from other income tax refund checks.

Energy Assistance (P.A. 188)
Authorizes expenditures of $66.5 million in federal funds for energy assistance programs.

Diesel Fuel Tax (P.A. 197)
Extends the expiration date for the diesel fuel tax through March, 1980.

Oil and Gas Severance Tax (P.A. 198)
Increases the severance tax from 2 percent to 6.6 percent on most oil wells, 4 percent for low production wells, and 5 percent for natural gas wells.

College Contribution Credit (P.A. 199)
Eliminates the expiration date for the income tax credit for contributions to nonprofit organizations that benefit colleges and universities.

Transportation

Railway Network (P.A. 191)
Enters Michigan into the interstate high speed intercity rail passenger network compact.

Wages and Employment

Unemployment Benefits (P.A. 28)

Protects the unemployment benefits of disabled persons by basing benefit claims on the 52 weeks preceding the disability, rather than the 52 weeks preceding the claim for benefits.

Minimum Wage (P.A. 45)

Amends the Minimum Wage Act to include a reference to the new Youth Employment Standards Act of 1978 and also to clarify applications of the Act to minors working in establishments where liquor is served.

PBB Liability (P.A. 62)

Limits an employer's liability for disabilities resulting from a worker's previous exposure to PBB and provides for extra benefits, if necessary, from the Silicosis and Dust Disease Fund.

Lie Detector Tests (P.A. 91)

Protects an employee's right to refuse to take lie detector, psychological, or similar tests in an employment situation.

Workplace Safety (P.A. 149)

Clarifies procedures for shutting down unsafe work areas under the Michigan Occupational Safety and Health Act and clarifies situations under which employers must furnish required safety equipment.

State Contracts (P.A. 194)

Requires that 50 percent of the workers employed by contractors or subcontractors on state financed projects be state residents, defined as persons who have lived in the state for at least a year.

APPENDIX C

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TABLE A-4
State Financial Assistance to Local Units of Government

(Millions)

Source of Revenue	Estimated Expenditures 1978-79				Appropriations and Estimated Distribution 1979-80				Recommendations and Estimated Distribution 1980-81			
	Cities & Villages	Town-ships	Counties	Total	Cities & Villages	Town-ships	Counties	Total	Cities & Villages	Town-ships	Counties	Total
I. Unrestricted State Shared Revenues												
A. State Revenue Sharing Act												
Sales Tax	$149.408	$70.970	$ ---	$ 220.378	$164.410	$ 78.090	$ ---	$ 242.500	$162.100	$ 97.400	$ ---	$ 259.500
Income Tax	99.626	5.850	64.129	169.605	112.100	6.500	63.900	182.500	119.700	10.300	70.000	200.000
Intangibles Tax	6.546	2.998	---	9.544	6.500	3.000	---	9.500	5.900	3.600	---	9.500
Single Business Tax	47.593	2.795	---	50.388	56.900	3.400	---	60.300	65.000	5.600	---	70.600
General Fund	2.775	5.725	---	8.500	2.775	5.725	---	8.500	1.090	2.410	---	3.500
B. Urban Grant	23.911	.089	---	24.000	---	---	---	---	---	---	---	---
C. Distressed Communities Grant	---	---	---	---	---	---	---	---	38.807	.193	---	40.000
Total	$329.859	$88.427	$ 64.129	$ 482.415	$342.685	$ 96.715	$ [illegible]900	$ 503.300	$393.597	$119.503	$ 70.000	$ 583.100
II. Restricted State Shared Revenues												
A. Michigan Transportation Fund	135.577	---	244.371	379.948	147.178	---	265.696	412.874	138.730	---	250.444	389.174
B. Other	5.815	1.171	.244	7.230	6.618	1.275	.289	8.182	6.256	1.285	.247	7.788
Total	$141.392	$ 1.171	$244.615	$ 387.178	$153.796	$ 1.275	$265.985	$ 421.056	$144.986	$ 1.285	$250.691	$ 396.962
III. Programatic Grants												
A. Judicial	---	---	3.782	3.782	---	---	4.057	4.057	---	---	4.764	4.764
B. Mental Health	---	---	86.665	86.665	---	---	113.054	113.054	---	---	185.192	185.192
C. Social Services	---	---	21.935	21.935	---	---	21.714	21.714	---	---	25.651	25.651
D. Other	57.768	.374	61.338	119.480	77.630	.711	74.092	152.433	78.521	.135	73.816	152.472
Total	$ 57.768	$ .374	$173.720	$ 231.862	$ 77.630	$ .711	$212.917	$ 291.258	$ 78.521	$ .135	$289.423	$ 368.079
IV. Reimbursement for Property Exempt from Taxes												
A. Single Business Tax Inventory Reimbursement	68.941	4.490	29.746	103.177	69.299	4.530	29.854	103.684	68.300	4.466	29.423	102.200
B. Other	2.119	2.327	3.534	7.981	2.955	4.191	5.319	12.465	3.214	3.012	4.102	10.327
Total	$ 71.060	$ 6.817	$ 33.281	$ 111.158	$ 72.254	$ 8.722	$ 35.173	$ 116.149	$ 71.514	$ 7.478	$ 33.535	$ 112.527
V. Other Reimbursements												
A. Presidential Primary	---	---	---	---	---	---	---	---	1.315	.745	.840	2.900
B. Other	2.928	.072	---	3.000	4.226	.159	4.576	8.961	2.928	.072	---	3.000
Total	$ 2.928	$ .072	---	$ 3.000	$ 4.226	$ .159	$ 4.576	$ 8.961	$ 4.243	$ .817	$ .840	$ 5.900
Grand Total	$603.007	$96.861	$515.745	$1,215.613	$650.591	$107.582	$582.551	$1,340.724	$692.861	$129.218	$644.489	$1,466.568

Source: Michigan Department of Management and Budget.

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Note: Detail in these tables will not necessarily add to totals because of rounding. Unless otherwise noted, all dollar figures are in current dollars.

TABLE C-1

Michigan Labor Force and Employment Estimates: 1970-1979

(Thousands)

Year		Total Labor Force	Employed[1]	Unemployed[2]	Percent Unemployed	Wage and Salary Workers	Workers Involved in Labor-Management Disputes
1970		3,596.0	3,356.0	241.0	6.7	3,003.5	35.9
1971		3,621.0	3,345.0	277.0	7.6	2,995.5	10.4
1972		3,705.0	3,445.0	260.0	7.0	3,114.9	2.8
1973		3,808.0	3,587.0	221.0	5.8	3,282.3	4.9
1974		3,883.0	3,595.0	288.0	7.4	3,278.2	10.5
1975		3,901.0	3,414.0	487.0	12.5	3,136.1	3.5
1976		4,000.0	3,626.0	374.0	9.4	3,231.2	6.4
1977		4,124.0	3,786.0	337.0	8.2	3,434.7	6.9
1978		4,202.0	3,913.0	289.0	6.9	3,568.8	5.4
1979		4,325.1	3,989.2	335.9	7.8	3,591.6	5.2
1978:	January	4,174.0	3,834.0	340.0	8.1	3,468.5	3.2
	February	4,171.0	3,872.0	299.0	7.2	3,464.6	2.4
	March	4,137.0	3,840.0	297.0	7.2	3,505.0	1.6
	April	4,167.0	3,892.0	275.0	6.6	3,541.9	3.2
	May	4,166.0	3,893.0	273.0	6.6	3,585.4	9.5
	June	4,251.0	3,952.0	300.0	7.0	3,594.8	13.1
	July	4,238.0	3,929.0	308.0	7.3	3,544.5	9.3
	August	4,211.0	3,873.0	338.0	8.0	3,521.8	6.5
	September	4,195.0	3,952.0	243.0	5.8	3,614.9	5.0
	October	4,193.0	3,963.0	230.0	5.5	3,648.8	2.1
	November	4,241.0	3,960.0	280.0	6.6	3,660.2	4.8
	December	4,284.0	3,996.0	289.0	6.7	3,674.9	4.1
1979:	January	4,257.0	3,916.0	341.0	8.0	3,589.4	4.1
	February	4,288.0	3,937.0	352.0	8.2	3,588.2	1.4
	March	4,290.0	3,949.0	341.0	8.0	3,599.9	1.5
	April	4,254.0	3,888.0	366.0	8.6	3,580.7	2.0
	May	4,327.0	4,016.0	311.0	7.2	3,644.0	3.8
	June	4,383.0	4,066.0	317.0	7.2	3,645.9	6.7
	July	4,404.0	4,065.0	339.0	7.7	3,577.6	3.8
	August	4,319.0	3,994.0	325.0	7.5	3,512.3	4.6
	September	4,327.0	4,017.0	310.0	7.2	3,579.9	25.1
	October	4,343.0	4,028.0	315.0	7.2	3,608.1	4.4
	November	4,369.0	4,024.0	345.0	7.9	3,581.5	1.8
	December	4,339.0	3,970.0	369.0	8.5	3,587.8	2.6

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1. Includes agricultural and nonagricultural employment. Excludes those involved in labor-management disputes.
2. Excludes the potential or latent supply of workers not active in the labor market and workers directly involved in labor-management disputes.

Source: Michigan Employment Security Commission.

TABLE C-5

Wage and Salary Workers in Government, Michigan : 1970-1979

(Thousands)

Year		Total Government Employment	Federal Government	State Government	Local Government
1970		506.5	57.7	115.9	333.0
1971		509.4	54.8	117.8	336.8
1972		526.6	55.2	122.4	349.0
1973		534.3	55.0	123.9	355.4
1974		562.5	56.2	127.5	378.8
1975		583.1	56.1	132.6	394.4
1976		593.7	55.5	134.3	403.9
1977		596.7	54.7	136.8	405.2
1978		617.7	55.0	142.8	419.9
1979		617.8	55.9	137.1	424.8
1978:	January	609.3	54.1	144.5	410.7
	February	623.0	54.2	150.5	418.3
	March	629.0	54.1	150.6	424.3
	April	625.6	54.5	151.0	420.1
	May	629.0	55.1	147.2	426.7
	June	622.1	56.2	139.8	426.1
	July	601.0	56.7	131.7	412.6
	August	591.7	56.3	129.7	405.7
	September	602.9	55.1	135.4	412.4
	October	621.0	54.6	142.9	423.5
	November	630.7	54.5	144.8	431.4
	December	628.4	55.0	146.0	427.4
1979:	January	610.3	55.1	138.4	416.8
	February	626.5	55.4	141.3	429.8
	March	627.0	55.7	140.2	431.1
	April	620.8	55.7	139.8	425.3
	May	622.7	55.9	137.0	429.8
	June	612.3	57.4	131.3	423.6
	July	599.4	57.4	124.3	417.7
	August	596.6	57.0	124.6	415.0
	September	595.0	55.7	137.5	401.8
	October	630.8	55.3	143.6	431.9
	November	634.8	54.7	143.8	436.3
	December	636.8	55.3	143.4	438.1

Source: Michigan Employment Security Commission.

TABLE C-6

Quarterly Michigan Labor Force, Employment and Unemployment: 1973-1979

(Thousands)

Year: Quarter		Labor Force	Employment	Un-employment	Percent Unemployed
1973:	I	3,744	3,470	274	7.3
	II	3,787	3,580	207	5.5
	III	3,840	3,637	203	5.3
	IV	3,862	3,658	204	5.3
1974:	I	3,866	3,589	277	7.2
	II	3,850	3,581	269	7.0
	III	3,916	3,633	283	7.2
	IV	3,903	3,578	325	8.3
1975:	I	3,920	3,356	564	14.4
	II	3,888	3,365	523	13.5
	III	3,899	3,432	467	12.0
	IV	3,899	3,501	398	10.2
1976:	I	3,933	3,519	414	10.5
	II	3,981	3,593	388	9.7
	III	4,053	3,685	368	9.1
	IV	4,033	3,707	326	8.1
1977:	I	4,076	3,690	386	9.5
	II	4,099	3,783	316	7.7
	III	4,151	3,798	353	8.5
	IV	4,171	3,876	295	7.1
1978:	I	4,161	3,849	312	7.5
	II	4,195	3,912	283	6.7
	III	4,214	3,918	296	7.0
	IV	4,239	3,973	266	6.3
1979:	I	4,279	3,934	345	8.1
	II	4,321	3,990	331	7.7
	III	4,360	3,035	325	7.5
	IV	4,350	4,007	343	7.9

Source: Michigan Employment Security Commission.

TABLE C-7

Employment and Unemployment Rates for Michigan SMSAs and Counties: 1978 and 1979

Area	1978 Number Employed	1978 Unemployment Rate	1979[1] Number Employed	1979[1] Unemployment Rate
Michigan	3,913,000	6.9	3,989,200	7.8
SMSA				
Ann Arbor-Ypsilanti	127,500	5.4	135,050	5.7
Battle Creek	76,500	6.6	77,425	6.7
Benton Harbor	68,000	8.4	68,600	8.8
Detroit	1,871,200	6.6	1,895,250	7.7
Flint	208,300	7.6	208,950	8.6
Grand Rapids	274,500	5.0	283,850	5.5
Jackson	61,700	5.8	64,275	7.1
Kalamazoo-Portage	124,000	5.7	125,725	5.7
Lansing-East Lansing	213,100	6.3	220,825	6.7
Muskegon-Muskegon Heights	70,400	8.2	71,175	8.7
Saginaw	98,300	5.4	98,325	7.2
Upper Peninsula	121,800	10.6	120,950	10.6
County				
Alcona	2,775	15.9	2,450	16.1
Alger	3,350	11.8	3,500	11.5
Allegan	29,850	5.9	32,100	6.7
Alpena	13,350	12.7	13,650	11.3
Antrim	6,075	9.3	6,375	10.5
Arenac	6,600	9.9	5,250	9.3
Baraga	2,525	12.2	2,700	12.0
Barry	15,225	6.3	17,950	5.4
Bay	50,700	6.3	50,125	7.2
Benzie	3,875	8.8	4,125	12.2
Berrien	68,000	8.4	68,600	8.8
Branch	19,450	6.5	22,075	7.5
Calhoun	61,300	6.6	59,475	7.0
Cass	23,400	5.7	23,175	7.3
Charlevoix	8,475	10.1	8,725	9.3
Cheboygan	7,475	20.1	8,750	15.6
Chippewa	10,175	18.8	9,900	16.3
Clare	8,750	10.3	8,700	10.6
Clinton	22,950	5.1	26,450	5.9
Crawford	3,625	11.6	3,100	15.6
Delta	14,825	9.9	14,425	11.3
Dickinson	10,625	7.4	10,975	7.2
Eaton	33,950	4.7	38,625	6.0
Emmet	12,350	8.5	12,450	9.3
Genesee	182,200	7.5	180,725	8.8
Gladwin	5,225	11.8	7,125	10.1
Gogebic	7,700	9.4	7,850	7.9
Grand Traverse	25,725	6.4	24,400	6.5
Gratiot	16,350	12.0	15,000	10.2
Hillsdale	20,500	5.2	20,125	7.5
Houghton	11,325	12.5	11,925	10.7
Huron	12,125	11.3	12,200	9.8
Ingham	136,275	6.6	131,975	6.7
Ionia	19,900	8.4	23,775	8.6
Iosco	8,525	10.5	8,425	11.3

TABLE C-7 (Continued)

Employment and Unemployment Rates for Michigan SMSAs and Counties: 1978 and 1979

Area	1978		1979[1]	
	Number Employed	Unemployment Rate	Number Employed	Unemployment Rate
Iron	5,625	9.3	5,475	9.4
Isabella	23,400	5.8	25,275	5.8
Jackson	61,700	5.8	64,275	7.1
Kalamazoo	99,025	5.4	96,725	5.3
Kalkaska	2,600	15.4	6,025	6.6
Kent	210,525	5.1	211,800	5.8
Keweenaw	625	13.8	825	11.0
Lake	2,475	7.5	2,350	12.6
Lapeer	19,375	6.1	27,975	6.8
Leelanau	6,525	9.4	6,850	7.9
Lenawee	35,150	6.5	36,200	7.7
Livingston	23,950	5.4	37,375	6.3
Luce	2,600	21.8	2,550	12.2
Mackinac	5,750	11.5	5,350	16.6
Macomb	259,000	5.6	297,500	8.4
Manistee	8,500	11.5	8,850	9.5
Marquette	31,000	7.5	29,600	8.8
Mason	11,050	7.7	11,150	11.1
Mecosta	12,700	6.8	13,025	7.4
Menominee	9,925	7.2	10,050	7.3
Midland	28,525	7.2	28,875	6.8
Missaukee	3,175	14.2	3,750	8.4
Monroe	49,250	6.1	57,875	9.1
Montcalm	17,475	13.3	17,575	9.6
Montmorency	2,675	9.3	2,950	12.1
Muskegon	63,750	8.1	62,825	8.6
Newaygo	11,250	10.5	11,800	10.5
Oakland	390,400	6.1	426,825	5.3
Oceana	6,600	9.9	8,350	9.7
Ogemaw	6,300	11.9	6,575	10.8
Ontonagon	2,725	16.8	2,700	12.4
Osceola	6,650	8.0	6,625	8.5
Oscoda	2,125	15.0	2,225	13.9
Otsego	6,850	7.7	7,900	7.4
Ottawa	63,975	4.7	72,050	4.6
Presque Isle	3,875	11.4	4,000	13.5
Roscommon	5,125	11.3	4,700	12.6
Saginaw	98,300	5.4	98,325	7.2
St. Clair	46,725	8.4	57,075	8.2
St. Joseph	21,200	7.5	22,300	10.4
Sanilac	14,650	8.4	13,975	12.2
Schoolcraft	3,075	13.4	3,150	14.3
Shiawassee	26,075	8.3	28,225	7.7
Tuscola	21,675	8.4	22,625	8.9
Van Buren	24,950	6.6	29,000	7.2
Washtenaw	127,500	5.4	135,050	5.7
Wayne	1,131,775	6.9	1,048,500	8.3
Wexford	9,250	11.5	8,900	11.1

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1. Average of January-November data.

Source: Michigan Employment Security Commission.

TABLE C-2
Wage and Salary Workers in Manufacturing, Durable Goods Industries, Michigan: 1970-1979

(Thousands)

Year	Total Manu-facturing	Total Durable Goods Manufac-turing	Lumber and Wood Products	Furniture and Fixtures	Primary Metal Products	Fabricated Metal Products	Non-electrical Machinery	Elec-trical Machinery	Motor Vehicles and Equipment	Other Trans-portation Equipment	Other Durable Goods
1970	1,080.1	861.6	13.3	20.8	90.0	140.5	162.9	42.3	335.3	14.2	41.8
1971	1,057.7	845.5	14.0	19.6	87.2	139.5	137.8	40.3	353.6	13.6	39.9
1972	1,094.4	876.8	15.1	20.8	87.7	145.7	140.3	42.3	369.5	14.0	41.4
1973	1,177.2	952.1	16.0	22.6	95.5	156.5	155.8	47.0	401.1	14.3	43.3
1974	1,114.0	897.2	15.5	21.9	93.9	141.6	158.1	45.4	366.1	11.5	43.2
1975	983.7	778.2	12.8	18.6	79.5	120.4	136.6	38.2	321.2	11.6	39.3
1976	1,058.9	844.9	14.0	19.9	85.7	137.6	137.4	39.4	357.9	12.8	40.2
1977	1,120.2	897.8	14.4	20.0	91.6	145.7	150.6	40.9	378.5	13.6	42.5
1978	1,153.3	927.5	14.2	21.0	92.7	151.0	161.1	42.3	389.0	14.0	42.2
1979	1,131.3	908.0	14.0	21.9	88.3	144.4	168.2	41.4	375.3	13.1	41.4
1978: January	1,143.4	923.9	13.6	19.8	94.3	150.0	158.3	41.9	391.8	13.2	41.0
February	1,130.1	911.9	13.5	19.9	94.2	147.3	158.8	42.9	380.9	13.4	41.0
March	1,143.0	922.6	13.8	19.9	94.3	147.2	159.8	43.0	389.6	13.7	41.3
April	1,148.2	926.7	14.0	20.3	92.4	149.2	160.3	43.2	390.8	13.9	42.6
May	1,154.1	931.9	14.4	20.6	92.4	150.5	161.1	42.3	393.8	14.0	42.8
June	1,157.2	931.1	14.4	21.3	90.8	151.5	162.0	42.4	391.1	14.5	43.1
July	1,127.2	905.5	14.1	21.1	90.6	147.5	157.5	41.1	377.8	14.2	41.6
August	1,097.0	869.8	14.7	21.5	88.2	145.6	158.3	40.0	345.9	14.5	41.1
September	1,172.5	940.9	14.4	21.8	93.3	154.1	162.0	42.3	395.9	14.4	42.7
October	1,186.2	952.2	14.6	21.8	93.9	155.6	163.8	43.1	402.3	14.3	42.8
November	1,185.2	952.1	14.6	21.7	93.9	156.3	163.5	42.5	402.8	14.1	42.7
December	1,194.5	960.9	14.6	21.8	94.2	157.3	167.9	43.1	405.4	14.2	42.4
1979: January	1,181.5	951.5	14.2	21.4	94.1	154.1	169.0	43.3	399.9	14.3	41.2
February	1,174.6	946.1	14.1	21.9	94.1	153.5	169.2	43.5	394.5	14.1	41.2
March	1,174.8	950.1	14.3	21.8	93.9	152.2	169.9	43.4	399.1	14.1	41.4
April	1,157.1	932.9	14.4	22.4	92.8	151.0	169.4	43.0	383.8	14.0	42.1
May	1,173.6	950.1	14.6	22.1	92.8	152.1	168.7	43.0	401.4	13.7	41.7
June	1,164.1	940.4	14.6	22.6	91.9	150.7	169.1	42.9	392.5	13.3	42.8
July	1,114.8	895.4	14.2	21.6	88.3	139.4	164.5	40.0	373.1	12.8	41.5
August	1,051.4	829.7	14.3	21.8	84.3	131.5	165.2	37.1	322.3	12.1	41.1
September	1,117.0	893.5	13.9	21.8	85.7	137.9	168.1	40.5	371.4	12.6	41.6
October	1,103.6	879.6	13.7	21.9	82.4	138.0	167.4	40.6	362.4	12.2	41.0
November	1,075.8	858.1	13.4	21.9	80.4	137.0	167.8	38.5	345.9	12.2	41.0
December	1,084.6	866.3	12.5	21.7	79.1	134.9	166.9	41.2	357.1	12.1	40.8

Source: Michigan Employment Security Commission.

TABLE C-3

Wage and Salary Workers in Manufacturing Nondurable Goods Industries, Michigan: 1970-1979

(Thousands)

Year	Total Manufacturing	Total Nondurable Goods Manufacturing	Food and Kindred Products	Textile Mill Products and Apparel	Paper and Allied Products	Printing, Publishing and Allied	Chemicals, Petroleum and Related	Other Nondurable Goods
1970	1,080.1	218.5	5.6	22.8	28.9	34.5	44.4	33.2
1971	1,057.7	212.2	5.4	23.9	26.7	34.2	44.5	29.5
1972	1,094.4	217.6	5.3	24.6	26.5	36.7	44.2	33.3
1973	1,177.2	225.1	5.8	27.0	26.9	36.8	45.2	37.4
1974	1,114.0	216.8	5.8	24.7	26.3	35.5	44.3	34.2
1975	983.7	205.5	5.5	22.2	23.5	34.5	45.9	27.9
1976	1,058.9	214.0	5.0	25.9	24.1	32.7	47.4	32.9
1977	1,120.2	222.4	5.9	27.3	24.3	32.3	49.6	37.0
1978	1,153.3	225.8	5.5	27.6	23.0	33.4	49.6	39.7
1979	1,131.2	223.3	5.9	25.3	23.3	34.1	49.4	37.3
1978: January	1,143.4	219.5	4.3	27.4	23.4	32.5	48.3	38.6
February	1,130.1	218.2	4.8	26.4	23.0	32.8	48.6	38.6
March	1,143.0	220.4	4.3	27.3	23.0	33.0	48.6	39.2
April	1,148.2	221.5	4.4	27.6	23.1	33.2	49.0	39.2
May	1,154.1	222.2	4.8	27.6	22.9	33.2	49.1	39.6
June	1,157.2	226.1	1.4	27.5	22.8	33.8	50.1	40.5
July	1,127.2	221.7	3.7	24.2	23.0	32.8	50.5	37.5
August	1,097.0	227.2	5.5	26.3	22.5	33.5	49.7	39.7
September	1,172.5	231.6	5.1	28.7	23.1	33.8	50.1	40.8
October	1,186.2	234.0	5.4	29.1	22.8	33.7	50.2	41.8
November	1,185.2	233.1	5.6	29.1	23.0	33.9	50.5	41.0
December	1,194.5	233.6	5.3	29.4	23.2	34.5	50.5	40.7
1979: January	1,181.5	230.0	3.8	28.6	23.5	33.8	50.2	40.1
February	1,174.6	228.5	3.5	27.5	23.6	33.9	49.9	40.1
March	1,174.8	224.7	0.9	27.2	23.4	34.1	49.5	39.6
April	1,157.1	224.2	0.7	27.6	23.3	34.4	49.6	38.6
May	1,173.6	223.5	1.7	27.6	23.5	34.2	49.4	37.1
June	1,164.1	223.7	3.2	25.2	23.9	34.5	49.9	37.0
July	1,114.8	219.4	4.3	21.8	23.4	33.8	49.5	36.6
August	1,051.4	221.7	6.8	21.5	23.6	34.4	49.3	[illegible]
September	1,117.0	223.5	7.5	24.0	23.0	34.1	48.9	36.0
October	1,103.6	224.0	6.7	25.5	22.7	33.7	49.2	36.2
November	1,075.8	217.7	4.4	22.9	22.5	33.8	48.4	35.7
December	1,084.6	218.3	3.4	24.1	22.8	34.0	48.8	35.2

Source: Michigan Employment Security Commission.

Table C-4
Wage and Salary Workers in Nonmanufacturing Industries, Michigan: 1970-1979

(Thousands)

Year		Total Non-manufacturing Industries	Construction	Transportation, Communication, & Utilities	Wholesale Trade	Retail Trade	Finance, Real Estate, & Insurance	Services	Mining
1970	. . . .	1,416.8	119.2	149.1	144.7	457.0	119.6	415.4	11.8
1971	. . . .	1,428.4	121.3	146.9	144.7	459.1	120.9	424.4	11.1
1972	. . . .	1,493.9	128.6	146.7	145.9	477.7	127.4	455.5	12.1
1973	. . . .	1,570.8	132.7	152.4	150.6	503.0	130.2	489.0	12.9
1974	. . . .	1,601.7	127.6	151.9	153.5	510.9	134.2	510.2	13.4
1975	. . . .	1,569.3	106.3	143.5	146.8	509.6	134.0	515.3	13.8
1976	. . . .	1,578.6	107.0	141.3	130.5	510.8	132.3	544.6	12.1
1977	. . . .	1,717.8	122.8	150.2	151.8	557.1	142.2	581.6	12.1
1978	. . . .	1,797.8	138.9	151.8	162.9	577.7	145.7	609.0	11.8
1979	. . . .	1,842.5	143.0	154.5	159.7	590.9	149.5	633.1	11.8
1978:	January	1,715.8	113.9	148.2	156.4	555.7	141.8	588.5	11.3
	February	1,711.5	111.7	149.0	156.4	549.3	142.0	591.8	11.3
	March	1,733.0	113.9	146.2	158.4	561.8	143.2	598.0	11.5
	April	1,768.1	128.1	151.4	160.3	571.1	144.0	601.3	11.9
	May	1,802.3	138.5	152.4	162.2	585.7	145.5	606.0	12.0
	June	1,815.5	146.2	150.1	164.5	585.6	147.5	609.3	12.3
	July	1,816.3	152.3	151.5	164.5	579.3	148.3	608.6	11.8
	August	1,833.1	156.0	153.7	165.8	582.4	148.4	614.5	12.3
	September	1,839.5	154.1	154.2	166.4	586.3	146.8	619.7	12.0
	October	1,841.6	154.1	154.3	165.8	585.4	146.6	623.6	11.8
	November	1,844.3	151.0	154.8	166.7	589.7	146.8	623.4	11.9
	December	1,852.0	147.3	155.8	167.0	600.0	147.2	623.1	11.6
1979:	January	1,797.6	122.8	153.7	160.7	583.4	147.1	618.5	11.4
	February	1,787.1	117.6	154.4	160.8	571.9	146.5	624.4	11.5
	March	1,798.1	121.8	155.0	160.7	576.2	147.2	625.7	11.5
	April	1,802.8	131.9	142.6	159.1	583.9	147.4	626.1	11.8
	May	1,847.7	143.0	158.0	160.3	593.0	148.9	632.6	11.9
	June	1,869.5	152.3	157.4	161.9	596.3	151.0	638.5	12.1
	July	1,863.4	157.5	155.9	159.5	588.6	151.8	638.0	12.1
	August	1,864.3	161.0	154.9	159.2	590.3	151.7	635.1	12.1
	September	1,867.9	158.4	155.5	159.6	593.9	150.2	638.3	12.0
	October	1,873.7	159.6	156.5	159.0	595.1	150.2	641.4	11.9
	November	1,870.9	152.2	155.0	157.1	604.1	150.6	640.1	11.8
	December	1,866.4	138.5	155.2	158.4	614.0	151.2	637.6	11.5

Source: Michigan Employment Security Commission.

TABLE C-8

Average Weekly and Hourly Earnings in Manufacturing Industries, Michigan and U.S.: 1961-1979

	Michigan			United States		
Year	Average Weekly Earnings	Average Hourly Earnings	Real Average Weekly Earnings (1967 Dollars)	Average Weekly Earnings	Average Hourly Earnings	Real Average Weekly Earnings (1967 Dollars)
1961	$112.32	$2.80	$126.63	$ 92.34	$2.32	$103.06
1962	121.43	2.91	136.59	96.56	2.39	106.58
1963	128.27	3.02	142.84	99.63	2.46	108.65
1964	135.11	3.11	149.29	102.97	2.53	110.84
1965	143.69	3.22	155.28	107.53	2.61	113.79
1966	145.10	3.35	150.05	112.34	2.72	115.58
1967	145.78	3.47	145.78	114.90	2.83	114.90
1968	164.15	3.79	157.38	122.51	3.01	117.57
1969	166.78	3.97	150.80	129.51	3.19	117.95
1970	168.22	4.14	143.29	133.33	3.35	114.99
1971	187.72	4.59	154.25	142.44	3.57	117.34
1972	211.52	4.94	167.61	154.71	3.82	123.46
1973	228.63	5.27	169.99	166.46	4.89	124.76
1974	232.03	5.63	155.62	176.80	4.42	119.43
1975	250.76	6.15	156.43	190.79	4.83	117.56
1976	290.97	6.81	172.27	209.32	5.22	121.76
1977	326.27	7.54	180.86	228.90	5.68	125.00
1978	346.20	8.07	178.36	249.27	6.17	127.57
1979	359.60	8.73	164.355	268.74	6.69	123.63
1978: January	313.14	7.58	169.26	234.02	5.97	125.01
February	309.84	7.47	169.94	236.81	5.98	125.70
March	316.26	7.53	167.87	242.40	6.00	127.71
April	339.45	7.93	178.47	243.61	6.03	127.21
May	340.71	8.00	177.18	245.23	6.07	126.86
June	344.78	8.21	177.26	249.29	6.11	127.64
July	347.73	8.07	178.69	248.65	6.17	126.41
August	342.21	8.05	174.78	248.86	6.16	125.81
September	363.03	8.23	183.63	255.60	6.28	128.25
October	369.38	8.47	183.86	257.00	6.33	127.92
November	371.06	8.53	183.69	260.94	6.38	129.18
December	394.51	8.60	195.11	268.27	6.48	132.22
1979: January	363.89	8.56	177.42	260.65	6.49	127.33
February	369.71	8.62	177.06	262.10	6.52	126.56
March	374.54	8.69	177.00	266.34	6.56	127.37
April	320.15	8.58	150.16	254.41	6.54	120.29
May	369.50	8.76	172.74	265.86	6.63	124.18
June	363.74	8.70	168.87	269.06	6.66	124.22
July	361.16	8.79	164.53	267.73	6.71	122.31
August	348.75	8.61	156.55	267.60	6.69	121.03
September	354.80	8.74	158.61	272.96	6.80	122.18
October	365.15	8.91	160.72	274.83	6.83	121.93
November	347.82	8.87	150.43	277.55	6.87	121.95
December[1]	375.94	9.04	161.21	285.77	6.97	124.25

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[1] Preliminary.

Source: Michigan Employment Security Commission.

TABLE C-9
Average Weekly Earnings in Selected Manufacturing Industries, Michigan: 1967-1979

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Manufacturing Industries	$145.78	$164.15	$166.78	$168.22	$187.72	$211.52	$228.63	$232.03	$250.76	$290.97	$326.27	$346.20	$359.60
Durable goods	149.50	168.87	170.67	171.45	192.26	217.80	235.79	239.66	258.53	302.14	340.16	359.69	372.82
Basic lumber products	93.40	97.42	101.14	105.61	113.36	118.80	128.14	136.26	147.72	164.68	171.62	199.06	211.48
Furniture	110.98	118.40	130.23	135.32	147.71	159.34	164.55	175.78	181.16	198.62	222.20	238.90	250.43
Primary metals	151.28	166.58	162.41	170.55	194.07	217.94	243.12	256.15	268.20	319.81	357.01	390.99	396.12
Fabricated metals	154.21	172.99	176.38	174.07	179.02	204.50	221.19	222.41	240.64	285.85	324.34	334.09	339.30
Nonelectrical machinery	156.36	164.04	177.65	178.31	188.83	216.19	238.46	247.48	253.01	279.47	319.50	348.29	381.15
Electrical machinery	123.54	138.65	147.22	150.27	174.64	193.76	196.51	207.58	221.51	251.75	284.96	309.48	299.45
Transportation equipment	153.88	181.97	178.08	179.01	207.35	237.67	255.55	255.99	284.17	334.89	378.11	394.14	409.20
Nondurable goods	129.81	141.46	149.14	152.41	166.41	182.81	191.62	198.43	218.67	241.69	267.46	285.94	302.89
Food and kindred products	127.04	134.56	146.41	151.21	160.41	176.12	187.17	203.33	224.80	244.40	263.38	280.57	305.07
Textile mill products and apparel	121.06	154.94	147.61	138.49	169.86	191.52	200.83	207.44	227.62	258.26	303.92	324.85	331.69
Paper	133.84	140.79	147.60	153.52	172.23	191.44	201.87	212.53	225.55	253.78	282.90	312.99	328.60
Printing and publishing	135.38	143.44	157.69	163.54	168.98	185.05	189.39	197.48	212.99	231.08	248.78	267.20	285.36
Chemicals	141.15	152.66	161.87	166.92	184.66	201.49	210.16	218.89	247.68	276.98	313.47	338.56	355.94

Source: Michigan Employment Security Commission.

TABLE C-10
Average Weekly Hours in Selected Manufacturing Industries, Michigan: 1967-1979

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Manufacturing Industries	42.0	43.3	42.0	40.6	40.9	42.8	43.4	41.2	40.8	42.7	43.3	42.9	41.2
Durable goods	42.2	43.5	42.1	40.6	40.9	43.0	43.9	41.4	40.9	43.0	43.7	43.3	41.3
Basic lumber products	40.0	39.3	39.2	39.0	39.0	38.9	39.2	38.4	38.6	39.3	39.5	39.1	38.4
Furniture	41.8	41.4	41.5	40.0	40.4	41.3	40.6	40.4	39.0	40.0	40.8	41.0	39.4
Primary metals	42.0	42.9	40.9	40.1	40.9	42.5	43.9	42.2	40.3	42.5	43.8	43.8	41.3
Fabricated metals	43.1	44.3	42.5	41.2	39.4	42.2	43.1	40.6	39.9	42.3	42.8	41.9	39.9
Nonelectrical machinery	43.7	43.1	43.8	41.4	40.2	42.7	44.2	43.1	41.0	41.7	43.1	43.4	43.2
Electrical machinery	40.4	41.6	41.8	40.9	42.2	43.0	42.6	41.7	40.6	42.0	43.0	42.9	40.4
Transportation equipment	41.5	44.2	41.9	40.4	41.5	43.9	44.7	41.0	41.6	44.6	44.8	44.3	41.6
Nondurable goods	41.3	42.0	41.6	40.3	40.8	41.7	41.2	40.3	40.3	41.1	41.7	41.5	40.4
Food and kindred products	41.3	40.9	41.3	40.9	40.7	41.4	41.0	41.4	41.7	41.8	41.9	41.2	41.2
Textile mill products and apparel	39.6	44.6	40.9	37.4	40.1	42.0	41.7	39.7	39.6	40.8	42.1	41.5	38.8
paper	44.1	43.9	44.7	42.8	44.1	45.3	44.9	44.0	43.5	44.4	45.3	45.2	43.3
Printing and publishing	39.7	39.7	39.1	37.5	37.4	37.3	37.2	36.9	36.1	36.8	37.9	37.9	37.0
Chemicals	41.7	42.3	42.1	41.4	41.3	42.1	42.1	41.7	41.3	42.1	42.9	43.2	42.3

Source: Michigan Employment Security Commission.

TABLE C-11
Michigan Personal Income by Major Sources: 1970-1979
(Millions)

Source	1970	1971	197	1973	1974	1975	1976	1977	1978	1979
Wage and Salary Disbursements	$25,200.0	$27,179.8	$30,35.0	$34,184.8	$35,514.0	$35,800.5	$41,075.8	$46,543.5	$52,553.0	$57,330.0
Farm	91.2	95.3	11.8	108.8	125.3	115.3	124.8	128.8	135.5	146.0
Mining	110.3	113.8	10.8	150.3	174.5	200.3	205.3	210.8	250.5	273.0
Contract Construction	1,362.5	1,472.0	1,60.5	1,689.0	1,710.8	1,498.8	1,625.3	1,955.8	2,398.0	2,734.0
Manufacturing	10,717.5	11,377.8	12,88.3	15,033.3	14,823.0	14,156.0	17,429.5	20,382.8	22,857.0	24,301.0
Durable	8,787.2	9,372.5	10,67.8	12,651.0	12,349.8	11,643.3	14,516.0	17,096.0	19,263.0	20,402.0
Nondurable	1,930.3	2,005.3	2,10.5	2,382.3	2,473.3	2,512.8	2,913.5	3,286.8	3,594.0	3,899.0
Wholesale Trade	1,410.3	1,536.8	1,61.5	1,848.5	2,054.8	2,064.0	2,130.5	2,359.5	2,752.3	3,082.0
Retail Trade	2,432.8	2,626.8	2,85.3	3,122.3	3,323.0	3,456.0	3,814.3	4,195.0	4,681.8	5,171.0
Finance, Insur., Real Estate	898.5	975.0	1,00.8	1,150.3	1,266.3	1,346.0	1,461.0	1,620.5	1,853.8	2,132.0
Trans., Comm., Utilities	1,410.0	1,518.8	1,63.8	1,880.5	1,953.0	1,986.5	2,248.8	2,505.8	2,866.0	3,166.0
Services	2,792.0	3,043.3	3,43.3	3,839.5	4,249.0	4,613.5	5,222.5	5,943.0	6,819.2	7,715.0
Government	3,940.0	4,383.3	4,83.0	5,315.8	5,783.0	6,308.5	6,748.5	7,168.8	7,850.2	8,507.0
Federal Civilian	540.5	559.3	61.3	656.8	713.8	765.8	833.2	860.3	937.0	1,060.0
Federal Military	151.8	163.8	18.0	193.5	199.0	198.3	207.3	200.5	194.3	198.0
State and Local	3,247.8	3,660.3	4,07.8	4,465.5	4,870.3	5,344.5	5,708.0	6,108.0	6,719.0	7,249.0
Other Industries	35.0	37.3	1.3	46.8	51.5	55.8	65.5	73.0	88.7	103.0
Other Labor Income	1,897.8	2,381.8	2,63.3	3,244.8	3,465.8	3,859.8	4,834.3	5,849.2	6,735.0	7,462.0
Proprietors' Income	2,291.8	2,343.0	2,64.3	2,801.0	2,907.5	2,793.8	2,700.8	3,140.5	3,526.0	3,808.0
Farm	264.8	230.8	30.3	469.3	535.0	466.5	343.8	445.8	565.2	622.0
Nonfarm	2,027.0	2,112.3	2,25.0	2,331.8	2,372.5	2,327.3	2,357.0	2,694.8	2,960.8	3,186.0
Total Income by Place of Work	29,389.5	31,904.5	35,52.5	40,230.5	41,887.3	42,454.0	48,610.8	55,533.3	62,814.0	68,600.0
Less: Contributions for Soc. Ins.	1,204.3	1,292.0	1,40.3	1,928.8	2,071.8	2,120.8	2,387.0	2,669.2	3,051.0	3,520.0
Plus: Residence Adjustment	157.5	163.3	18.3	210.8	228.5	252.3	295.0	326.0	363.8	399.0
Net Income by Place of Residence	28,342.7	30,775.8	34,30.5	38,512.5	40,044.0	40,585.5	46,518.8	53,190.0	60,126.7	65,479.0
Plus: Dividends, Interest, Rent	4,342.0	4,584.8	4,81.3	5,175.5	5,861.0	6,330.3	7,022.5	7,800.0	8,800.5	10,055.0
Plus: Transfer Payments	3,234.3	3,829.6	4,20.0	4,780.0	5,945.5	7,822.2	8,104.0	8,490.7	9,017.0	9,950.0
Total Personal Income by Residence	$35,918.9	$39,190.1	$43,4.7	$48,468.0	$51,850.5	$54,738.0	$61,645.2	$69,480.8	$77,944.3	$85,484.0
Total Real Personal Income (1967 Dollars)	$30,595.3	$32,202.2	$34,4.8	$36,035.7	$34,775.7	$34,147.2	$36,498.1	$38,514.8	$40,156.7	$39,069.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis. 1979 estimates by Michigan Department of Management and Budget.

TABLE C-12

Quarterly Michigan Personal Income by Major Sources: 1973-1978

(Millions)

Source	1973				1974				1975			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Wage and Salary Disbursements	$ 8,132.3	$ 8,453.5	$ 8,531.5	$ 9,067.4	$ 8,492.4	$ 8,688.1	$ 9,046.1	$ 9,287.4	$ 8,394.6	$ 8,658.9	$ 9,014.8	$ 9,732.3
Farm	23.7	21.4	31.5	32.2	27.1	25.8	36.8	35.6	26.8	23.7	32.1	32.7
Mining	31.2	35.4	39.7	43.9	37.8	43.1	45.3	48.3	43.3	49.0	52.5	55.5
Contract Construction	339.6	411.4	477.0	461.0	350.2	417.9	490.1	452.5	304.8	362.6	411.8	419.5
Manufacturing	3,643.1	3,754.2	3,686.2	3,949.7	3,629.4	3,619.0	3,738.6	3,836.0	3,289.6	3,389.7	3,540.8	3,935.9
Durable	3,074.5	3,174.7	3,080.9	3,320.9	3,043.3	3,016.7	3,100.5	3,189.2	2,705.6	2,787.4	2,903.7	3,246.5
Nondurable	568.6	579.4	605.3	628.8	586.1	602.3	638.0	646.8	583.9	602.3	637.2	689.3
Wholesale Trade	447.8	449.7	453.5	497.6	502.8	493.6	503.9	554.4	512.1	495.4	501.9	554.6
Retail Trade	730.3	762.4	785.8	843.7	767.7	819.1	857.6	878.6	813.8	831.3	879.1	932.8
Finance, Insur., Real Estate	273.8	280.8	283.8	311.8	302.6	307.4	314.4	341.8	324.8	329.6	330.7	360.8
Trans., Comm., Utilities	440.9	455.6	477.8	506.1	464.3	479.1	494.8	514.8	458.0	477.5	511.3	539.7
Services	902.3	943.7	962.2	1,031.3	987.3	1,038.2	1,079.1	1,144.4	1,081.1	1,121.5	1,155.7	1,255.1
Government	1,288.7	1,327.4	1,321.9	1,377.7	1,410.3	1,432.1	1,472.6	1,467.9	1,526.5	1,564.8	1,585.9	1,631.2
Federal Civilian	157.3	163.6	160.3	175.6	161.8	178.7	176.6	196.6	182.3	192.0	185.1	206.4
Federal Military	48.8	47.8	44.9	52.1	50.8	49.2	47.9	51.0	50.0	50.1	46.1	52.0
State and Local	1,082.6	1,116.1	1,116.7	1,150.1	1,197.7	1,204.1	1,248.1	1,220.3	1,294.2	1,322.8	1,354.7	1,372.8
Other Industries	11.0	11.5	12.0	12.3	12.8	12.8	13.0	13.0	13.8	13.8	14.0	14.3
Other Labor Income	771.9	802.4	809.8	860.7	828.8	847.9	882.8	906.3	905.0	933.5	971.9	1,049.3
Proprietors' Income	647.3	660.2	714.5	779.1	680.3	686.7	767.9	772.6	629.8	656.3	732.8	774.9
Farm	92.6	83.6	132.6	160.6	113.0	106.3	163.6	152.2	84.1	93.4	146.8	142.2
Nonfarm	554.7	576.6	581.9	618.5	567.3	580.4	604.3	620.4	545.7	562.9	586.0	632.7
Total Income by Place of Work	9,551.5	9,916.0	10,055.8	10,707.2	10,001.5	10,222.7	10,696.8	10,966.4	9,929.4	10,248.7	10,719.5	11,556.4
Less: Contributions for Soc. Ins.	511.7	534.6	457.7	424.7	549.6	574.5	491.4	456.2	562.4	588.1	503.3	467.0
Plus: Residence Adjustment	50.1	52.1	52.6	55.9	54.6	55.9	58.2	59.8	59.1	61.0	63.5	68.6
Net Income by Place of Residence	9,090.0	9,433.6	9,650.7	10,338.3	9,506.5	9,704.1	10,263.5	10,569.8	9,426.2	9,721.7	10,279.7	11,157.9
Plus: Dividends, Interest, Rent	1,262.3	1,273.0	1,302.0	1,338.3	1,372.5	1,447.0	1,510.0	1,531.5	1,539.0	1,566.0	1,597.8	1,627.5
Plus: Transfer Payments	1,192.1	1,175.4	1,174.4	1,238.0	1,397.2	1,492.3	1,498.3	1,557.7	1,939.1	1,973.6	1,962.6	1,947.0
Total Personal Income By Residence	$11,544.3	$11,882.0	$12,127.1	$12,914.6	$12,276.2	$12,643.4	$13,271.8	$13,659.1	$12,904.1	$13,261.1	$13,840.1	$14,732.6
Total Real Personal Income	$ 8,893.9	$ 8,927.1	$ 8,917.0	$ 9,291.1	$ 8,560.8	$ 8,618.5	$ 8,789.3	$ 8,806.6	$ 8,245.5	$ 8,356.1	$ 8,553.8	$ 8,977.8

TABLE C-12 (Continued)
Quarterly Michigan Personal Income by Major Sources : 1973-1978
(Millions)

Source	1976 I	1976 II	1976 III	1976 IV	1977 I	1977 II	1977 III	1977 IV	1978 I	1978 II	1978 III	1978 IV
Wage and Salary Disbursements	$ 9,544.7	$10,127.8	$10,268.7	$11,134.6	$10,790.0	$11,408.2	$11,803.3	$12,542.0	$12,220.1	$12,834.0	$[illegible],172.1	$14,326.9
Farm	27.0	26.1	35.4	36.3	29.1	27.1	35.2	37.4	29.8	28.3	37.0	40.5
Mining	43.8	50.3	56.1	55.0	48.8	58.6	52.6	50.7	50.3	62.6	66.8	70.8
Contract Construction	304.5	394.4	461.7	464.7	345.8	469.1	567.6	573.2	449.5	566.5	686.5	695.5
Manufacturing	4,019.6	4,324.1	4,270.9	4,814.9	4,740.0	5,026.2	5,106.7	5,509.8	5,348.4	5,592.4	5,589.2	6,327.0
Durable	3,348.7	3,614.1	3,529.4	4,023.9	3,976.7	4,218.7	4,276.4	4,624.2	4,519.1	4,720.9	4,688.5	5,334.5
Nondurable	670.9	710.1	741.5	791.0	763.3	807.5	830.3	885.6	829.3	871.5	900.7	992.5
Wholesale Trade	522.3	512.1	523.7	572.4	553.7	565.1	594.4	646.4	646.7	653.9	685.6	766.0
Retail Trade	878.7	937.4	970.2	1,028.0	963.3	1,019.4	1,072.2	1,140.1	1,084.6	1,144.4	1,187.8	1,264.9
Finance, Insur., Real Estate	345.2	353.8	367.4	394.6	383.2	392.8	409.6	435.0	438.7	444.5	463.8	506.7
Trans., Communicatn., Utilities	521.6	545.7	570.7	610.8	568.7	605.1	651.7	680.3	663.0	704.2	727.2	771.5
Services	1,208.5	1,285.0	1,315.8	1,413.3	1,363.8	1,443.1	1,515.2	1,620.9	1,574.0	1,657.7	1,738.3	1,849.2
Government	1,658.6	1,682.8	1,680.2	1,727.0	1,777.6	1,783.8	1,779.1	1,828.2	1,915.9	1,957.3	1,966.5	2,010.6
Federal Civilian	193.2	212.2	202.1	225.7	204.6	214.1	207.3	234.3	212.7	232.6	230.0	261.6
Federal Military	53.0	51.3	48.9	54.0	53.4	52.6	44.4	50.1	48.4	48.1	46.7	51.2
State and Local	1,412.4	1,419.2	1,429.2	1,447.3	1,519.6	1,517.2	1,527.4	1,432.8	1,654.8	1,676.6	1,689.8	1,697.7
Other Industries	15.5	16.3	16.5	17.3	17.0	18.0	18.5	19.5	19.8	22.3	23.0	23.8
Other Labor Income	1,123.3	1,191.9	1,208.5	1,310.4	1,356.0	1,433.7	1,483.4	1,576.2	1,566.1	1,644.8	1,688.1	1,836.1
Proprietors' Income	645.7	659.1	672.0	723.9	714.6	746.5	786.8	892.6	811.8	845.2	893.7	975.3
Farm	98.0	78.0	82.8	85.0	89.9	86.0	103.4	166.4	123.3	122.2	151.6	168.1
Nonfarm	547.7	581.1	589.2	638.9	624.7	660.5	683.4	726.2	688.5	723.0	742.1	807.2
Total Income by Place of Work	11,313.7	11,978.8	12,149.2	13,169.0	12,860.6	13,588.3	14,073.5	15,010.9	14,598.0	15,323.9	15,753.8	17,138.2
Less: Contributions for Soc. Ins.	633.3	661.9	566.2	525.6	629.5	810.5	758.4	470.9	733.5	849.1	794.2	674.3
Plus: Residence Adjustment	68.5	72.7	73.7	80.0	75.6	79.9	82.7	87.8	84.6	88.8	91.2	99.2
Net Income by Place of Residence	10,749.0	11,389.7	11,656.8	12,723.3	12,306.7	12,857.9	13,397.8	14,627.6	13,949.1	14,563.8	15,050.8	16,563.0
Plus: Dividends, Interest, Rent	1,674.8	1,727.3	1,780.5	1,840.0	1,878.0	1,930.0	1,976.3	2,015.8	2,078.0	2,148.8	2,243.5	2,330.3
Plus: Transfer Payments	2,042.2	2,034.1	2,009.8	2,017.9	2,138.0	2,087.9	2,116.7	2,148.2	2,226.3	2,198.3	2,275.0	2,317.4
Total Personal Income By Residence	$14,465.8	$15,151.0	$15,447.1	$16,581.3	$16,322.5	$16,875.7	$17,490.8	$18,791.7	$18,253.3	$18,910.8	$19,569.3	$21,210.8
Total Real Personal Income	$ 8,719.6	$ 9,056.2	$ 9,081.2	$ 9,623.5	$ 9,316.5	$ 9,385.8	$ 9,578.7	$10,212.9	$ 9,797.8	$ 9,834.0	$ 9,984.3	$10,516.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis. Michigan Department of Management and Budget.

TABLE C-13
Personal Income and Real Per Capita Personal Income, U.S. and Major Industrial States: 1975-1978

	Personal Income (millions of dollars)				Real Personal Income (millions of 1967 dollars)				Real Per Capita Personal Income (1967 dollars)			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
United States	1,248,631	1,374,265	1,523,631	1,708,545	774,585	806,021	839,466	874,383	3,636	3,755	3,880	4,010
Michigan	54,737	61,645	69,480	77,943	34,147	36,498	38,514	40,156	3,748	4,005	4,210	4,370
California	139,472	155,626	175,155	199,010	88,051	92,635	97,200	103,221	4,154	4,304	4,441	4,630
Florida	46,632	50,903	56,963	65,084	28,928	29,855	31,385	33,308	3,495	3,574	3,707	3,876
Illinois	75,400	81,827	90,340	100,091	47,843	49,562	51,446	52,486	4,273	4,428	4,582	4,669
Indiana	29,816	33,180	36,949	41,412	18,752	19,797	20,653	21,193	3,530	3,726	3,860	3,944
Massachusetts	35,319	38,185	41,621	45,751	21,788	21,883	22,694	24,946	3,745	3,778	3,928	4,320
New Jersey	49,762	53,625	58,121	64,281	29,869	30,417	31,332	32,780	4,073	4,134	4,270	4,474
New York	117,904	124,975	133,714	145,963	71,805	72,032	72,829	75,007	3,973	3,990	4,062	4,226
Ohio	61,955	68,527	75,959	84,432	38,577	40,405	41,897	44,899	3,593	3,779	3,917	4,177
Pennsylvania	69,171	75,579	82,540	90,939	42,672	44,354	45,427	46,659	3,598	3,758	3,851	3,971
Texas	68,331	77,760	88,247	100,601	42,284	45,078	47,650	50,025	3,455	3,578	3,721	3,844
Wisconsin	25,771	28,104	31,461	35,241	16,415	16,819	17,685	18,393	3,577	3,649	3,808	3,931

Source: Compiled by the Michigan Department of Management and Budget based on data from the U.S. Department of Commerce, Bureau of Economic Analysis, and the U.S. Department of Labor, Bureau of Labor Statistics.

TABLE C-18
New Incorporations in Michigan: 1955-1979

Year	Profit	Non-Profit	Foreign (out of state)	Total
1955	4,619	1,094	379	6,092
1956	4,337	1,196	389	5,922
1957	3,842	1,391	461	5,694
1958	3,900	1,272	404	5,576
1959	4,812	1,209	527	6,548
1960	4,800	1,261	499	6,560
1961	4,788	1,312	497	6,597
1962	5,135	1,243	601	6,979
1963	5,102	1,241	528	6,871
1964	5,825	1,256	593	7,674
1965	6,152	1,286	627	8,065
1966	6,315	1,356	640	8,311
1967	6,341	1,361	715	8,417
1968	7,700	1,588	825	10,113
1969	9,586	1,767	1,064	12,417
1970	8,378	1,782	1,054	11,214
1971	8,270	1,993	1,082	11,345
1972	9,202	2,134	1,175	12,511
1973	9,709	1,878	1,093	12,680
1974	9,342	2,106	1,009	12,457
1975	9,996	2,138	926	13,060
1976	11,545	2,080	972	14,597
1977	13,273	2,082	956	16,311
1978	14,538	2,148	1,039	17,725
1979	18,654	2,217	1,062	21,933

Source: Michigan Department of Commerce, Corporation Division.

TABLE C-14

U.S. Consumer Price Index - All Urban Consumers - 1979

(1967=100)

Group	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Average 1979	Average Percent Change 1978-79
ALL ITEMS	204.7	207.1	209.1	211.5	214.1	216.6	218.9	221.1	223.4	225.4	227.5	229.9	217.4	11.3
FOOD AND BEVERAGES	218.3	222.4	224.4	226.3	228.2	229.3	230.7	230.2	231.0	232.1	233.1	235.5	228.5	10.8
Food	223.9	228.2	230.4	232.3	234.3	235.4	236.9	236.3	237.1	233.2	239.1	241.7	234.5	10.9
Food at home	223.1	228.0	229.9	231.7	233.4	234.2	235.5	233.9	234.7	235.4	236.0	238.7	232.9	10.8
Cereals and bakery prod.	210.0	212.2	213.5	214.5	216.2	217.8	220.1	223.7	225.6	227.0	228.7	231.6	220.1	10.1
Meats,pltry,fish,eggs	223.3	232.3	237.0	240.0	242.2	239.8	239.0	230.2	231.0	230.3	230.2	235.5	234.2	14.6
Dairy products	198.4	200.6	201.5	202.4	203.8	205.5	206.3	208.6	211.3	213.3	216.0	216.9	207.1	11.6
Fruits and vegetables	221.6	226.5	225.9	226.5	226.8	233.8	238.1	237.8	231.8	232.0	229.5	230.2	230.0	8.0
Food away from home	230.2	233.4	236.0	238.4	241.1	242.7	244.9	246.5	247.6	249.6	251.3	253.4	242.9	11.2
Alcoholic beverages	166.0	167.7	169.2	170.2	171.5	172.1	172.7	173.3	174.2	176.0	177.4	178.0	172.4	7.9
HOUSING	213.1	215.6	217.6	219.8	222.4	225.5	228.4	231.5	234.6	237.7	240.8	243.6	227.6	12.2
Shelter	222.8	225.9	228.0	230.7	233.5	236.7	240.1	243.9	247.4	251.5	255.9	259.4	239.7	13.9
Rent, residential	170.3	171.0	171.3	172.0	173.8	174.7	175.9	177.5	179.0	181.4	182.1	182.9	176.0	7.3
Other rental costs	221.3	224.8	226.3	228.3	230.3	232.3	236.0	238.2	239.3	241.6	243.1	244.9	233.9	12.6
Homeownership	241.6	245.6	248.2	251.7	254.9	258.8	263.0	267.6	271.9	276.7	282.4	286.9	262.4	15.5
Fuel & other utilities	221.5	223.3	225.9	227.5	232.2	239.0	243.5	247.2	251.2	252.9	252.0	255.1	239.3	10.8
Fuels	256.3	259.3	264.0	266.8	274.6	286.2	293.8	299.7	306.6	310.3	307.0	311.8	286.4	16.0
Oil,coal & bottle gas	316.4	326.1	339.5	349.8	364.3	391.2	412.9	438.6	461.6	470.8	477.4	488.0	403.1	35.1
Gas (piped) & electricity	239.5	241.2	244.0	245.3	251.6	259.9	264.5	266.5	270.1	272.5	267.3	270.8	257.8	10.8
Hsehld. furnish & oper.	184.8	186.0	187.4	188.6	189.2	190.1	190.4	191.2	192.2	193.3	195.1	195.8	190.3	7.1
APPAREL AND UPKEEP	160.7	161.4	164.3	165.4	166.1	165.7	164.3	166.3	169.8	171.0	171.7	172.2	166.6	4.4
Apparel commodities	155.8	156.3	159.2	160.2	160.8	160.2	158.6	160.6	164.2	165.2	165.9	166.1	161.1	3.5
Men's and boys'	157.4	156.7	158.7	159.6	160.1	160.4	159.2	159.6	162.7	164.2	165.4	165.4	160.8	2.2
Women's and girls'	146.9	147.7	151.8	152.2	153.2	150.8	147.8	151.3	155.9	155.5	155.1	154.6	151.9	1.7
Footwear	168.7	168.9	171.6	174.2	175.0	176.7	176.6	177.5	180.1	182.6	183.8	184.3	176.7	7.9
TRANSPORTATION	193.9	195.6	198.1	202.9	207.7	212.6	216.6	219.6	221.4	222.7	224.9	227.7	212.0	14.3
Private	193.8	195.5	198.1	203.2	208.1	213.3	217.4	220.4	222.0	223.1	225.0	227.5	212.3	14.8
Public	190.0	190.7	191.5	192.6	193.3	194.0	197.1	200.8	205.2	209.1	216.5	223.0	200.3	6.7
MEDICAL CARE	230.7	232.6	233.9	235.1	236.3	237.7	239.9	241.8	243.7	245.9	248.0	250.7	239.7	9.3
ENTERTAINMENT	182.3	183.2	184.8	186.5	187.8	188.2	189.1	190.2	191.1	192.0	192.8	193.4	188.5	6.7
OTHER GOODS & SERVICES	190.5	191.9	192.8	193.2	193.9	194.5	195.2	197.0	201.7	202.3	202.9	204.0	196.7	7.3
Commodities	195.8	198.3	200.5	203.3	205.8	208.4	210.5	212.2	214.1	215.6	217.4	219.4	208.4	11.4
Commodities less food	181.9	183.7	185.9	188.9	191.6	194.7	197.0	199.5	201.8	203.4	205.4	207.2	195.1	11.7

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE C-15
Detroit Consumer Price Index - All Urban Consumers - 1979
(1967=100)

Group	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Average 1979	Average Percent Change 1978-79
Aug	1978-79													
ALL ITEMS	205.1	208.8	211.6	213.2	213.9	215.4	219.5	222.2	223.7	227.2	231.3	233.2	218.8	12.7
FOOD AND BEVERAGES	216.2	219.7	221.2	222.9	224.0	224.4	225.5	222.8	224.1	225.6	226.7	229.0	223.5	10.3
Food	219.0	222.7	224.2	226.1	227.1	227.4	228.4	225.5	226.9	228.5	229.6	232.1	226.5	10.2
Food at Home	217.9	222.4	223.4	225.0	226.4	226.5	228.1	224.7	226.3	227.4	228.7	232.2	225.8	11.0
Cereals and bakery prod	220.0	222.1	223.1	225.6	227.2	226.8	229.8	232.1	232.8	235.9	235.7	238.7	229.2	9.7
Meats,pltry,fish,eggs	219.4	226.3	226.8	229.6	232.3	228.9	231.0	220.3	221.6	222.6	223.8	228.6	225.9	14.7
Dairy products	209.8	213.5	216.6	217.9	216.1	219.9	219.6	220.3	228.2	229.9	231.6	230.5	221.2	17.1
Fruits and vegetables	197.2	202.0	204.0	201.8	203.8	209.5	210.7	204.5	199.9	196.2	198.6	203.2	202.6	5.4
Other foods at home	248.9	251.9	251.6	253.4	254.5	255.0	256.6	260.3	262.6	264.9	266.4	271.2	258.9	6.0
Food away from home	230.8	232.6	235.2	237.9	238.1	238.7	238.5	236.6	237.6	240.6	241.1	241.4	237.4	8.6
Alcoholic beverages	198.5	200.2	202.6	202.4	203.5	207.0	207.9	209.0	208.9	209.2	209.8	209.8	205.7	11.5
HOUSING	210.0	216.3	220.9	220.9	220.4	222.1	229.1	234.0	235.7	241.6	249.8	252.1	229.4	16.6
Shelter	220.3	230.5	236.1	235.5	231.7	233.4	243.5	250.2	252.2	260.0	272.5	276.1	245.2	20.2
Rent, residential	168.9	170.6	171.1	173.1	174.3	174.9	177.2	178.6	178.7	182.8	183.4	183.9	176.5	8.5
Other rental costs	200.0	200.7	200.9	201.7	202.2	202.4	204.4	204.9	205.0	214.3	214.6	215.1	205.5	7.8
Homeownership	230.5	242.4	249.1	248.0	243.2	245.1	256.9	264.7	267.0	275.6	290.5	294.1	258.9	22.0
Fuel & other utilities	232.3	229.0	233.6	235.5	247.9	252.4	255.2	259.8	261.1	264.5	260.7	263.3	249.6	11.2
Fuels	267.3	262.2	269.0	272.2	291.3	298.2	301.7	308.7	310.8	315.7	309.7	313.4	293.4	15.3
Oil,coal & bottle gas	326.4	337.1	354.2	368.8	379.8	412.0	431.6	462.3	488.7	497.3	505.4	512.5	423.0	38.6
Gas (piped) & elect'y	258.9	252.2	257.8	259.7	279.5	283.8	285.5	290.0	289.5	294.0	286.6	289.9	277.3	12.2
Hsehld furnish & oper	169.5	170.5	172.3	172.9	174.2	174.2	174.7	174.7	175.9	177.5	180.6	179.3	174.7	8.1
APPAREL AND UPKEEP	144.8	144.1	147.7	147.7	148.3	145.4	145.6	151.1	152.0	151.6	151.2	148.1	148.1	0.0
Apparel commodities	137.9	137.2	140.7	140.3	140.7	137.5	137.7	143.3	144.0	143.5	142.4	139.0	140.4	-1.2
Men's and boys'	148.7	150.0	153.6	153.3	151.7	145.7	149.6	147.1	151.1	149.6	152.1	150.3	150.2	-1.2
Women's and girls'	124.8	126.5	127.8	125.8	127.6	126.4	126.3	138.0	134.5	134.5	132.7	126.0	129.2	-2.9
Footwear	148.6	139.6	151.3	151.7	153.1	149.1	153.8	158.3	159.7	159.7	152.9	153.3	156.6	6.2
TRANSPORTATION	194.7	196.2	197.8	202.7	205.5	209.5	213.2	216.1	217.8	220.6	221.7	224.4	210.0	13.6
Private	194.6	196.2	197.8	202.7	205.7	209.7	213.4	216.4	218.0	220.9	221.7	224.1	210.1	13.9
Public	195.6	196.0	197.3	200.8	200.6	203.0	206.6	209.1	212.7	214.4	222.4	229.0	207.3	7.5
MEDICAL CARE	266.6	267.8	268.3	271.2	269.8	272.7	275.2	275.9	276.6	278.3	281.6	290.0	274.5	9.0
ENTERTAINMENT	179.8	181.0	177.8	182.2	184.2	185.0	183.4	181.7	178.2	180.6	181.3	178.7	181.2	3.5
OTHER GOODS & SERVICES	192.1	192.7	193.8	193.8	193.9	193.9	195.1	197.6	201.2	201.5	200.9	201.5	196.5	6.6
Commodities	188.7	192.4	195.0	196.6	196.9	198.4	201.9	203.5	205.5	207.4	210.6	212.0	200.7	11.9
Commodities less food	175.1	178.7	181.7	183.2	183.2	185.0	189.3	192.3	194.5	196.5	200.3	201.3	188.4	12.5

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE C-16
Consumer Price Indexes, Annual Averages for U.S. and Detroit:1966-1979

	1966		1967		1968		1969		1970		1971		1972	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All items	97.2	96.7	100.0	100.0	140.2	104.3	109.8	110.6	116.3	117.4	121.3	121.7	125.3	126.2
Food	99.1	98.3	100.0	100.0	103.6	103.1	108.9	108.9	114.9	115.2	118.4	117.3	123.5	122.9
Food at home	100.3	99.3	100.0	100.0	103.2	103.0	108.2	109.1	113.7	115.4	116.4	116.1	121.6	121.6
Cereals and bakery products	97.7	96.9	100.0	100.0	100.4	100.5	103.3	104.7	108.9	110.9	113.9	114.5	114.7	115.8
Meats, poultry, fish and eggs	92.6	101.6	100.0	100.0	102.2	102.8	110.3	113.5	116.5	121.1	116.9	119.1	128.0	131.2
Dairy products	95.8	93.8	100.0	100.0	103.3	104.8	106.7	108.5	111.8	113.6	115.3	113.4	117.1	114.7
Fruits and vegetables	100.1	99.5	100.0	100.0	107.9	104.9	109.3	106.1	113.4	110.9	119.1	114.9	125.0	118.4
Other foods at home	102.0	100.5	100.0	100.0	102.6	101.6	107.9	106.9	114.1	113.1	115.9	114.4	116.7	116.1
Food away from home	95.1	94.5	100.0	100.0	105.2	104.0	111.6	108.6	119.9	115.0	126.1	123.3	131.1	128.6
Housing	97.2	95.7	100.0	100.0	104.2	104.9	110.8	113.7	118.9	124.2	124.3	128.3	129.2	133.3
Shelter	96.8	94.4	100.0	100.0	104.8	106.2	113.3	118.7	123.6	133.2	128.8	137.3	134.4	143.1
Rent	98.2	96.9	100.0	100.0	102.4	103.3	105.7	107.1	110.1	111.5	115.2	116.6	119.0	120.4
Homeownership	96.3	94.0	100.0	100.0	105.7	106.8	116.0	121.0	128.5	137.6	133.7	141.4	140.1	147.7
Fuel and utilities	98.8	99.5	100.0	100.0	101.3	100.6	103.6	101.5	107.6	104.6	115.1	110.7	120.2	115.4
Fuel oil and coal	97.0	96.3	100.0	100.0	103.1	101.8	105.6	105.4	110.1	109.8	117.5	113.7	118.5	113.9
Gas and electricity	99.6	100.1	100.0	100.0	100.9	100.0	102.8	100.8	107.3	103.3	114.7	111.3	120.5	116.9
Household furnishings and operation	97.0	96.7	100.0	100.0	104.4	103.5	109.0	106.3	113.4	109.4	118.1	112.6	121.0	115.1
Apparel and Upkeep	96.1	97.4	100.0	100.0	105.4	104.3	111.5	108.9	116.1	112.0	119.8	115.5	122.3	118.3
Men's and boys'	96.5	96.7	100.0	100.0	105.7	106.4	112.4	112.5	117.1	116.7	120.3	117.3	121.9	117.3
Women's and girls'	95.6	98.1	100.0	100.0	105.9	103.1	111.7	104.3	116.0	104.6	120.1	111.2	123.0	115.4
Footwear	95.3	96.6	100.0	100.0	105.3	103.6	111.8	111.2	117.7	118.5	121.5	120.7	124.9	124.8
Transportation	97.2	97.8	100.0	100.0	103.2	104.0	107.2	107.4	112.7	109.9	118.6	114.6	120.0	116.5
Private	97.5	97.7	100.0	100.0	103.0	103.4	106.5	106.6	111.1	108.5	116.1	111.8	117.5	113.9
Public	95.2	98.2	100.0	100.0	104.6	112.0	112.7	117.7	128.5	126.1	137.7	148.4	143.4	148.5
Medical Care	93.4	93.4	100.0	100.0	106.1	106.6	113.4	114.4	120.6	124.4	128.4	134.1	132.5	141.4

TABLE C-16 (Continued)
Consumer Price Indexes, Annual Averages for U.S. and Detroit: 1966-1979

	1973		1974		1975		1976		1977		1978[1]		1979[1]	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All items	133.1	134.5	147.7	149.1	161.2	160.3	170.5	168.9	181.5	180.4	195.4	194.1	217.4	218.8
Food	141.4	143.6	161.7	164.1	175.4	171.6	180.8	176.5	192.2	186.0	211.4	205.5	234.5	226.5
Cereals and bakery products	127.7	134.5	166.1	182.1	184.8	189.8	180.6	184.5	183.5	193.7	199.9	208.9	220.1	229.2
Meats, poultry, fish and eggs	160.4	166.5	163.9	167.4	178.0	172.2	179.4	172.4	178.4	171.9	204.3	196.9	234.2	225.9
Dairy products	127.9	127.5	151.9	154.9	156.6	158.8	169.3	167.3	173.9	173.9	185.6	188.9	207.1	221.2
Fruits and vegetables	142.5	135.6	165.8	158.9	171.0	157.4	175.4	158.9	191.6	171.0	212.9	192.3	230.0	202.6
Other foods at home	130.3	132.5	162.8	164.2	185.6	177.9	189.9	184.5	224.1	215.3	N.A.	244.2	N.A.	258.9
Food away from home	141.4	138.8	159.4	159.2	174.3	174.1	186.1	186.4	200.3	199.2	218.4	218.7	242.9	237.4
Housing	135.0	137.4	150.6	151.0	166.7	163.8	177.2	173.2	189.6	184.6	202.8	196.7	227.6	229.4
Shelter	140.7	147.4	154.3	159.5	169.7	170.3	179.0	177.2	191.1	188.0	210.4	204.0	239.7	245.2
Rent	124.2	124.4	130.2	129.8	137.3	136.1	145.4	142.1	153.5	150.8	164.0	162.6	176.0	176.5
Homeownership	146.7	152.1	163.2	165.5	181.7	177.2	191.7	184.3	204.9	195.4	227.2	212.2	262.4	258.9
Fuel and utilities	126.9	121.2	150.2	142.3	167.8	161.6	182.7	182.8	202.2	205.7	216.0	224.4	239.3	249.6
Fuel oil and coal	136.0	129.3	214.6	208.7	235.3	226.7	250.8	248.6	283.4	285.7	298.3	305.3	403.1	423.0
Gas and electricity	126.4	123.1	145.8	144.4	169.6	171.7	188.9	197.7	213.4	223.0	232.6	247.0	257.8	277.3
Household furnishings and operation	124.9	117.3	140.5	130.5	158.1	145.0	168.5	156.6	177.0	160.5	177.7	161.6	190.3	174.7
Apparel and Upkeep	127.1	122.3	136.2	132.4	142.3	137.9	147.6	142.0	154.2	146.7	159.6	148.1	166.6	148.1
Men's and boys'	126.4	121.8	136.4	135.7	142.2	144.5	147.2	151.5	154.0	154.3	157.3	152.1	160.8	150.2
Women's and girls'	127.3	117.4	134.9	123.2	138.1	126.5	141.9	128.1	146.4	130.9	149.3	133.1	151.9	129.2
Footwear	130.2	132.6	138.1	144.6	144.2	146.9	149.9	147.2	156.9	150.8	163.8	147.5	176.7	156.6
Transportation	123.8	123.6	137.7	138.7	150.6	149.1	165.5	160.2	177.3	174.7	185.5	184.9	212.0	210.0
Private	121.5	121.3	136.6	137.2	149.8	148.0	164.6	159.5	176.7	174.8	185.0	184.5	212.3	210.1
Public	144.8	150.8	148.0	156.1	158.6	160.8	174.2	168.6	182.4	172.6	188.7	192.8	200.3	207.3
Medical Care	137.7	148.4	150.5	162.8	168.6	187.4	184.7	209.1	202.4	234.8	219.4	251.8	239.7	274.5

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1. Due to revisions made in the U.S. and Detroit Consumer Price Indexes in 1978, some of the categories have been changed and are no longer comparable to categories published in previous years. Beginning in 1978 the indexes reflect the prices paid by all urban consumers.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE C-17
Consumer Price Index and Inflation Rates for U.S. and Detroit: 1940-1979

	U.S.		Detroit			U.S.		Detroit	
Year	Index	Percent Change	Index	Percent Change	Year	Index	Percent Change	Index	Percent Change
1940	42.0	1.0	41.9	0.5	1960	88.7	1.6	88.2	0.9
1941	44.1	5.0	44.6	6.4	1961	89.6	1.0	88.7	0.7
1942	48.8	10.7	49.5	11.0	1962	90.6	1.1	88.9	0.2
1943	51.8	6.1	52.1	5.3	1963	91.7	1.2	89.8	1.0
1944	52.7	1.7	52.9	1.5	1964	92.9	1.3	90.5	0.8
1945	53.9	2.3	54.3	2.6	1965	94.5	1.7	92.6	2.3
1946	58.5	8.5	59.2	9.0	1966	97.2	2.9	96.7	4.4
1947	66.9	14.4	67.4	13.8	1967	100.0	2.9	100.0	3.4
1948	72.1	7.8	72.7	7.9	1968	104.2	4.2	104.3	4.3
1949	71.4	-1.0	71.8	-1.2	1969	109.8	5.4	110.6	6.0
1950	72.1	1.0	73.0	1.7	1970	116.3	5.9	117.4	6.1
1951	77.8	7.9	78.8	7.9	1971	121.3	4.3	121.7	3.7
1952	79.5	2.2	80.7	2.4	1972	125.3	3.3	126.2	3.7
1953	80.1	0.8	82.0	1.6	1973	133.1	6.2	134.5	6.6
1954	80.5	0.5	82.3	0.4	1974	147.7	11.0	149.1	10.9
1955	80.2	-0.4	82.2	-0.1	1975	161.2	9.1	160.3	7.5
1956	81.4	1.5	83.8	1.9	1976	170.5	5.8	168.9	5.4
1957	84.3	3.6	86.2	2.9	1977	181.5	6.5	180.4	6.8
1958	86.6	2.7	87.5	1.5	1978	195.4	7.7	194.1	7.6
1959	87.3	0.8	87.4	-0.1	1979	217.4	11.3	218.8	12.7

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE C-19
Michigan Liquid Assets: 1970-1979
(Millions)

End of Year	Total	Demand Deposits[1]	Time Deposits[1]	Savings and Loan Shares	Credit Union Shares & Deposits
1970	$25,370.1	$ 7,092.3	$12,770.7	$ 4,193.4	1,313.7
1971	28,743.7	7,841.7	14,413.3	5,001.7	1,487.0
1972	32,002.6	8,555.2	15,754.5	6,029.8	1,663.1
1973	34,991.7	9,127.5	17,210.3	6,747.8	1,906.1
1974	37,214.7	9,187.0	18,655.7	7,320.0	2,052.0
1975	39,987.8	9,116.7	19,950.6	8,625.5	2,295.0
1976	43,567.2	9,084.7	21,873.5	10,175.0	2,434.0
1977	48,881.0	10,143.9	24,137.0	11,761.8	2,838.3
1978	54,427.8	11,400.4	26,618.8	13,248.6	3,160.0
1979[2]	58,888.7	11,969.3	29,025.1	14,444.3	3,450.0

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1. Individual, Partnerships and Corporate Deposits only.
2. Preliminary

Sources: Federal Deposit Insurance Company, the Michigan Credit Union League, and the Federal Home Loan Bank of Indianapolis.

TABLE C-20
Interest Rates, U.S.: 1960-1979
(Percent per annum)

	U.S. Government Security Yields			High-Grade Municipal Bonds (Standard & Poor's)	Corporate Bonds (Moody's Aaa)
Period	3-month Treasury Bills[1]	3-5 Year Issues[2]	Taxable Bonds[3]		
1960	2,928	3.99	4.02	3.73	4.41
1961	2,378	3.60	3,90	3.46	4.35
1962	2,778	3.57	3.95	3.18	4.33
1963	3,157	3.72	4.00	3.23	4.26
1964	3,549	4.06	4.15	3.22	4.40
1965	3,954	4.22	4.21	3.27	4.49
1966	4,881	5.16	4.65	3.82	5.13
1967	4,321	5.07	4.85	3.98	5.51
1968	5,339	5.59	5.26	4.51	6.18
1969	6,677	6.85	6.12	5.81	7.03
1970	6,458	7.37	6.58	6.51	8.04
1971	4,348	5.77	5.74	5.70	7.39
1972	4,071	5.85	5.64	5.27	7.21
1973	7,041	6.92	6.30	5.18	7.44
1974	7,886	7.81	6.99	6.09	8.57
1975	5,838	7.55	6.98	6.89	8.83
1976	4,989	6.94	6.78	6.49	8.43
1977	5,265	6.85	7.06	5.56	8.02
1978	7,221	8.30	7.89	5.90	8.73
1979	10,033	10.37	8.76	6.39	9.62

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1. Rate on new issues within period.
2. Selected note and bond issues.
3. April 1953 to date, bonds due or callable 10 years and after.

Source: *Economic Indicators,* U.S. Government Printing Office, Washington D.C.

TABLE C-22

Motor Vehicle Registrations: 1956-1979

(Thousands)

	Michigan				U.S.	
Year	Automobiles	Trucks and Buses	Total	Percent Change in Total	Total Motor Vehicle Registrations[1]	Michigan as Percent of U.S.
1956	2,747	391	3,138	0.8	65,183	4.81
1957	2,823	390	3,213	2.4	67,125	4.79
1958	2,717	392	3,109	-3.2	68,297	4.55
1959	2,796	405	3,201	3.0	71,354	4.49
1960	2,893	413	3,306	3.3	73,869	4.48
1961	2,938	417	3,354	1.5	75,958	4.42
1962	3,026	429	3,455	3.0	79,173	4.36
1963	3,161	439	3,600	4.2	82,714	4.35
1964	3,294	465	3,759	4.4	86,301	4.36
1965	3,497	494	3,991	6.2	90,361	4.42
1966	3,516	508	4,024	0.8	93,962	4.28
1967	3,587	546	4,133	2.7	96,931	4.26
1968	3,734	583	4,317	4.5	100,885	4.28
1969	3,873	615	4,488	4.0	105,097	4.26
1970	3,918	651	4,569	1.8	198,375	4.22
1971	4,052	687	4,740	3.7	112,922	4.20
1972	4,265	745	5,010	5.7	118,506	4.23
1973	4,436	804	5,240	4.6	125,420	4.18
1974	4,536	865	5,401	3.1	129,938	4.16
1975	4,628	918	5,546	2.7	132,951	4.17
1976	4,726	975	5,701	2.8	138,549	4.11
1977	4,954	1,032	5,986	5.0	143,747	4.16
1978	5,124	1,121	6,245	4.3	148,778	4.20
1979[2]	5,300	1,188	6,488	3.9	154,412	4.20

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1. This definition of motor vehicles includes only non-military automobiles, trucks, and buses.

2. Estimate

Source: *Motor Vehicle Facts and Figures*, Motor Vehicle Manufacturers of the U.S., Inc., selected issues.

TABLE C-25
U.S. Motor Vehicle Production : 1960-1979

		Passenger Cars	Trucks and Buses	Total Motor Vehicles
1960		6,703,108	1,202,011	7,905,119
1961		5,522,019	1,130,919	6,652,938
1962		6,943,334	1,253,977	8,197,311
1963		7,644,337	1,464,399	9,108,776
1964		7,745,492	1,562,368	9,307,860
1965		9,335,227	1,802,603	11,137,830
1966		8,604,712	1,791,587	10,396,299
1967		7,412,659	1,611,077	9,023,736
1968		8,848,620	1,971,790	10,820,410
1969		8,224,392	1,981,519	10,205,911
1970		6,549,058	1,732,799	8,281,857
1971		8,580,311	2,085,959	10,666,270
1972		8,828,205	2,482,503	11,310,708
1973		9,667,152	3,014,432	12,681,584
1974		7,324,504	2,746,538	10,071,042
1975		6,717,064	2,264,575	8,981,639
1976		8,497,660	2,999,703	11,497,363
1977		9,191,377	3,473,626	12,665,003
1978		9,176,635	3,722,567	12,899,202
1979		8,434,150	5,046,586	11,480,736
1978:	January	683,682	245,574	929,256
	February	684,311	282,904	967,215
	March	899,548	336,566	1,236,114
	April	870,689	320,998	1,191,687
	May	922,862	336,273	1,259,135
	June	865,742	350,833	1,216,575
	July	576,653	272,404	849,057
	August	537,648	281,024	818,672
	September	737,090	300,060	1,037,150
	October	909,911	369,558	1,279,469
	November	856,309	344,980	1,201,289
	December	632,190	281,393	913,583
1979:	January	785,724	344,553	1,130,277
	February	737,527	316,919	1,054.446
	March	887,781	369,300	1,284,081
	April	723,139	264,638	987,777
	May	933,626	348,907	1,282,533
	June	826,368	301,643	856,531
	July	584,487	213,625	798,112
	August	449,109	137,200	586,309
	September	622,326	184,606	806,932
	October	790,882	230,103	1,020,985
	November	633,591	187,777	821,368
	December	459,590	147,615	607,205

Source: *Motor Vehicle Facts and Figures*, Motor Vehicle Manufacturers Association of the U.S. Inc., selected issues, 1978 figures supplied by Motor Vehicle Manufacturers Association of the U.S., Inc.

TABLE C-21

New Private Housing Units Authorized in Michigan SMSAs: 1974-1979

SMSA	1974	1975	1976	1977	1978	1979[1]
Ann Arbor	1,839	633	1,105	1,670	2,390	1,335
Battle Creek	491	654	961	845	781	812
Bay City	814	481	822	527	500	243
Detroit	18,078	13,004	18,214	24,672	26,409	19,333
Flint	1,948	1,485	1,861	3,282	3,277	2,280
Grand Rapids	3,560	3,427	3,811	4,563	5,832	4,131
Jackson	670	890	916	1,177	663	582
Kalamazoo-Portage	1,298	1,655	1,972	2,640	1,674	1,658
Lansing-East Lansing	2,443	1,865	2,509	3,800	3,455	3,971
Muskegon-Muskegon Heights	692	639	1,163	847	1,173	600
Saginaw	1,174	885	1,041	1,343	1,251	1,039

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[1] Preliminary

Source: *Housing Units Authorized by Building Permits and Public Contracts*, Construction Reports, series C40, U.S. Department of Commerce, Bureau of the Census, 1974-1978.

TABLE C-24

Passenger Car Assemblies, 1966-1979 Model Years, in Percent of Total by States

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
U.S. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MICHIGAN	35.5	34.2	35.0	34.5	34.2	31.0	32.4	33.3	31.0	33.2	33.9	32.4	30.2	29.1
California	8.9	8.9	7.8	7.9	8.3	8.2	7.4	8.4	7.6	6.7	6.7	8.1	7.8	8.8
Delaware	4.3	4.7	4.8	4.5	6.1	4.5	4.6	4.4	3.8	3.5	4.9	4.0	5.6	5.4
Georgia	5.8	5.3	4.9	5.4	5.7	5.1	6.3	5.8	5.4	5.5	6.6	6.5	5.7	5.0
Illinois	3.0	4.3	4.5	4.5	3.3	5.8	4.8	4.4	4.0	4.6	3.5	4.5	5.0	5.6
Kansas	2.4	2.4	2.6	2.4	2.5	2.4	2.3	2.2	1.5	2.3	2.8	2.9	2.6	2.7
Kentucky	1.0	1.0	0.9	0.9	1.0	1.2	0.9	0.9	0.8	1.3	1.1	1.1	1.3	1.1
Maryland	2.3	2.1	2.4	2.3	2.7	1.9	2.2	2.3	2.9	3.3	3.1	2.6	2.4	2.6
Massachusetts	1.7	1.6	1.3	1.6	1.7	1.2	1.4	1.7	1.2	0.9	1.0	1.5	1.7	1.8
Minnesota	1.3	1.1	1.1	1.1	1.1	1.3	0.9	0.8	0.9	1.3	1.0	1.3	0.9	---
Missouri	10.2	9.3	10.1	10.5	11.2	11.2	9.8	10.1	11.2	9.8	9.2	11.1	11.9	11.1
New Jersey	6.9	7.0	5.6	5.6	5.5	6.7	7.1	6.3	6.5	6.5	6.8	6.6	6.1	6.5
New York	2.1	2.1	2.3	2.1	2.2	1.9	2.2	2.0	1.9	1.6	1.4	2.5	2.6	2.6
Ohio	4.9	6.7	7.2	7.5	6.4	8.8	9.6	9.0	10.8	10.4	8.7	7.3	9.8	8.9
Oklahoma	---	---	---	---	---	---	---	---	---	---	---	---	---	0.4
Pennsylvania	---	---	---	---	---	---	---	---	---	---	---	---	---	1.4
Texas	3.0	3.0	2.8	2.7	2.6	2.3	2.2	2.4	2.6	3.0	2.9	2.5	2.1	2.3
Virginia	0.9	0.7	0.9	0.7	0.8	0.6	0.5	0.5	0.3	---	---	---	---	---
Wisconsin	5.8	5.6	5.8	5.8	5.7	5.2	5.4	5.5	7.6	6.1	6.4	5.0	4.3	4.5

Source: *Ward's Automotive Reports*, Ward's Communications, Inc., selected issues.

TABLE C-26

U.S. Automobile Sales, Truck Sales, Inventories, and Stock: 1956-1979

(Thousands)

Year	U.S. Automobile Sales (Retail)	Domestic Nameplate Sales	Foreign Import Sales	Foreign Import Sales As Percent of U.S. Auto Sales	End of Year Inventory	U.S. Stock of Autos (Still in use)	Truck Retail Sales	U.S. Stock of Trucks
1956	6,007	5,909	98	1.6	512	49,804	927	9,544
1957	5,961	5,754	207	3.5	652	51,432	879	9,776
1958	4,575	4,204	371	8.1	544	52,492	731	10,057
1959	6,094	5,408	614	10.1	567	55,087	928	10,532
1960	6,637	6,139	498	7.5	841	57,103	925	10,803
1961	5,934	5,555	379	6.4	855	58,854	908	11,043
1962	7,093	6,752	341	4.8	841	60,920	1,068	11,463
1963	7,744	7,344	400	5.2	935	63,493	1,230	11,902
1964	8,098	7,614	484	6.0	923	66,051	1,352	12,445
1965	9,328	8,760	568	6.1	1,264	68,940	1,534	13,126
1966	9,024	8,373	651	7.2	1,309	71,264	1,614	14,357
1967	8,342	7,573	769	9.2	1,133	72,968	1,519	14,988
1968	9,638	8,607	1,031	10.7	1,467	75,385	1,805	15,685
1969	9,584	8,466	1,118	11.7	1,464	78,495	1,929	16,586
1970	8,383	7,116	1,267	15.1	1,220	80,448	1,746	17,688
1971	10,249	8,676	1,573	15.3	1,447	83,137	2,009	18,462
1972	10,944	9,322	1,622	14.8	1,310	86,439	2,531	19,773
1973	11,441	9,670	1,770	15.5	1,600	89,805	3,029	21,412
1974	8,867	7,451	1,395	16.0	1,655	92,608	2,587	23,312
1975	8,636	7,050	1,589	18.4	1,424	95,241	2,351	24,813
1976	10,100	8,607	1,493	14.8	1,465	97,818	3,044	26,560
1977	11,178	9,104	2,071	18.5	1,731	99,904	3,486	28,222
1978	11,308	9,308	2,000	17.7	1,729	102,957	3,914	30,565
1979	10,651	8,325	2,326	21.9	1,767	N.A.	3,480	N.A.

Source: *Automotive News*, Crain Automotive Group, Inc., selected issues. *Motor Vehicle Facts and Figures*, Motor Vehicle Manufacturers Association of the U.S., Inc.

TABLE C-27

Average Employment, Earnings, and Hours in Motor Vehicles and Equipment Industries, Michigan and U.S.: 1956-1979

Year	MICHIGAN Number Employed in Motor Vehicles and Equipment (Thousands)	Average Weekly Earnings	Average Weekly Hours	Average Hourly Earnings	UNITED STATES Number Employed in Motor Vehicles and Equipment (Thousands)	Average Weekly Earnings	Average Weekly Hours	Average Hourly Earnings	Michigan Motor Vehicle Employment as Percent of U.S. Motor Vehicle Employment
1956	. . . . 411.7	$ 97.68	40.4	$2.42	792.5	$ 96.82	41.2	$2.35	51.9
1957	. . . . 387.7	100.47	39.6	2.54	769.3	100.61	40.9	2.46	50.4
1958	. . . . 288.5	103.04	38.9	2.67	606.5	101.24	39.7	2.55	47.6
1959	. . . . 303.4	115.60	40.7	2.84	692.3	111.38	41.1	2.71	43.8
1960	. . . . 311.2	119.96	41.0	2.93	724.1	115.21	41.0	2.81	43.0
1961	. . . . 268.4	117.18	39.3	2.98	632.3	114.69	40.1	2.86	42.4
1962	. . . . 299.2	134.02	43.4	3.09	691.7	127.67	42.7	2.99	43.3
1963	. . . . 315.8	141.68	43.9	3.23	741.3	132.68	42.8	3.10	42.6
1964	. . . . 329.3	147.98	44.5	3.33	752.9	138.03	43.0	3.21	43.7
1965	. . . . 364.5	159.85	46.2	3.46	842.7	147.63	44.2	3.34	43.3
1966	. . . . 381.9	157.19	43.7	3.60	861.6	147.23	42.8	3.44	44.3
1967	. . . . 361.8	155.29	41.6	3.73	815.8	144.84	40.8	3.55	44.3
1968	. . . . 382.8	131.75	45.2	2.91	873.7	168.09	43.1	3.90	43.8
1969	. . . . 398.7	178.74	42.1	4.25	911.4	170.56	41.6	4.10	43.7
1970	. . . . 333.6	178.30	39.9	4.47	797.3	170.07	40.3	4.22	41.8
1971	. . . . 351.8	209.54	41.6	5.04	842.1	194.46	41.2	4.72	41.8
1972	. . . . 367.7	240.05	43.9	5.47	860.9	219.22	42.9	5.11	42.7
1973	. . . . 399.0	258.07	44.8	5.76	955.3	238.06	43.6	5.46	41.8
1974	. . . . 364.3	258.10	41.0	6.29	890.8	239.54	40.6	5.90	40.7
1975	. . . . 327.9	286.98	41.7	6.88	774.1	262.68	40.6	6.46	42.4
1976	. . . . 355.7	338.70	44.7	7.58	850.6	305.30	43.0	7.10	41.8
1977	. . . . 369.8	382.46	45.0	8.50	890.6	348.39	44.1	7.90	41.5
1978	. . . . 389.0	397.47	44.4	8.95	997.2	368.48	43.3	8.51	39.0
1979[1]	. . . . 377.0	411.26	41.8	9.85	979.2	377.30	40.8	9.36	38.5

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[1] Preliminary.

Source: U.S. Department of Labor and Michigan Employment Security Commission.

TABLE C-28

U.S. Automobile Price Indexes, Personal Consumption Expenditures and Installment Credit: 1956-1979

Year	Wholesale Price Index Motor Vehicles and Equipment	Consumer Price Index New Cars (1967=100)	Consumer Price Index Used Cars	Personal Consumption Expenditures Auto and Parts (billions)	Automobile Installment Credit (millions) Extended	Repaid	Total Consumer Credit-Auto Paper
1956	91.2	93.5	69.1	$ 16.4	$15,515	$14,555	$ 14,420
1957	95.1	98.4	77.4	18.3	16,465	15,545	15,340
1958	98.1	101.5	80.2	15.4	14,226	15,415	14,152
1959	100.3	105.9	89.5	19.5	17,779	15,579	16,420
1960	98.8	104.5	83.6	20.1	17,657	16,419	17,658
1961	98.6	104.5	86.9	18.4	16,029	16,552	17,135
1962	98.6	104.1	94.8	22.0	19,694	17,447	19,381
1963	97.8	103.5	96.0	24.3	22,126	19,254	22,254
1964	98.3	103.2	100.1	25.8	24,046	21,369	24,934
1965	98.5	100.9	99.4	30.3	27,227	23,543	28,619
1966	98.6	99.1	97.0	30.3	27,341	25,404	30,556
1967	100.0	100.0	100.0	30.5	26,667	26,499	30,724
1968	102.8	102.8	102.6	37.5	31,424	28,018	34,130
1969	104.8	104.4	103.1	40.4	32,354	29,882	36,602
1970	108.5	107.6	104.3	37.3	29,791	30,137	35,184
1971	114.7	112.0	110.2	46.6	34,873	31,393	38,664
1972	118.0	111.0	110.5	53.1	40,194	34,729	44,129
1973	119.2	111.1	117.6	57.5	46,453	39,452	51,130
1974	128.2	117.5	122.6	47.9	45,429	44,929	52,871
1975	144.6	127.6	146.4	53.2	51,413	48,406	55,879
1976	153.7	135.7	167.9	69.7	62,988	52,750	66,116
1977	163.7	142.9	182.8	81.5	72,888	59,652	79,352
1978	176.0	153.8	186.5	91.2	88,987	69,430	98,909
1979	190.4	166.0	201.0	90.2	93,440	78,684[1]	113,665[1]

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[1] Estimate

Source: U.S. Department of Labor, Bureau of Labor Statistics, U.S. Department of Commerce, Bureau of Economic Analysis and The Federal Reserve System, the Board of Governors.

TABLE C-29

Quarterly U.S. Motor Vehicle Production and Auto Sales : 1973-1979

(Thousands)

Year: Quarter		U.S. Auto Production	U.S. Truck and Bus Production	Total Motor Vehicle Production	Domestic Auto Sales	Import Auto Sales	Total U.S. Auto Sales
1973:	I	2,710	814	3,524	2,473	465	2,938
	II	2,708	811	3,519	2,742	508	3,250
	III	1,898	658	2,556	2,247	424	2,671
	IV	2,352	731	3,083	2,208	375	2,583
1974:	I	1,787	747	2,534	1,772	365	2,137
	II	2,059	741	2,800	2,167	338	2,505
	III	1,663	601	2,264	1,949	391	2,340
	IV	1,816	658	2,474	1,562	301	1,863
1975:	I	1,299	482	1,781	1,522	410	1,932
	II	1,833	588	2,421	1,739	432	2,171
	III	1,663	575	2,238	1,761	443	2,204
	IV	1,922	620	2,542	2,028	304	2,332
1976:	I	2,172	731	2,903	2,054	328	2,382
	II	2,423	843	3,266	2,410	379	2,789
	III	1,727	728	2,455	1,997	420	2,417
	IV	2,176	697	2,873	2,145	367	2,512
1977:	I	2,337	863	2,873	2,163	454	2,617
	II	2,615	909	3,524	2,575	622	3,197
	III	1,932	843	2,775	2,114	555	2,669
	IV	2,307	858	3,165	2,253	440	2,693
1978:	I	2,268	865	3,133	2,056	485	2,541
	II	2,659	1,008	3,667	2,776	562	3,338
	III	1,851	853	2,704	2,177	540	2,717
	IV	2,398	996	3,394	2,299	413	2,712
1979:	I	2,411	1,031	3,442	2,173	553	2,726
	II	2,483	915	3,398	2,262	682	2,944
	III	1,656	535	2,191	1,993	578	2,571
	IV	1,884	565	2,449	1,892	512	2,404

Source: Motor Vehicle Manufacturers Association of the U.S.

TABLE C-30
Rate Changes Granted to Regulated Utilities in 1979

Telephone Companies		
Michigan Bell Telephone Company (Net)	$35,531,000	
General Telephone Company of Michigan	-387,730	
Upper Peninsula Telephone Company	21,348	
Parma Telephone Company	41,498	
Total		$ 35,206,116
Electric Companies		
The Detroit Edison Company (Net)	$59,998,439	
Consumers Power Company (Net)	37,941,678	
Upper Peninsula Power Company	3,482,936	
Indiana & Michigan Electric Company	10,767,000	
Michigan Power Company	2,693,338	
Wisconsin Electric Power Company	2,233,000	
Thumb Electric Cooperative	224,380	
Fruit Belt Electric Cooperative	403,000	
Southeastern Michigan Rural Electric Cooperative	129,500	
Northern Michigan Electric Cooperative	723,186	
Total		118,596,457
Gas Companies		
Michigan Consolidated Gas Company (Net)	$55,366,000	
Consumers Power Company (Net)	5,248,000	
Lake Superior District Power Company	143,157	
Michigan Power Company	-122,000	
Total		60,635,157
Steam Companies		
Consumers Power Company		163,661
Water Companies		
Northern Michigan Water Company		78,484
NET TOTAL INCREASES		$214,679,875

Source: Michigan Department of Commerce, Public Service Commission.

TABLE C-31
Prices Received by Michigan Farmers: 1967-1979

	Market Year Averages												
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Corn $ per bu.	.97	1.03	1.14	1.32	1.03	1.49	2.52	2.91	2.35	2.38	1.93	2.05	2.38
Wheat $ per bu.	1.26	1.07	1.20	1.40	1.34	1.67	4.30	3.64	3.10	2.87	2.12	3.01	3.61
Oats $ per bu.	.70	.57	.59	.70	.71	.84	1.35	1.65	1.40	1.47	1.50	1.32	1.36
Soybeans $ per bu.	2.47	2.39	2.33	2.84	3.05	4.60	5.73	6.28	4.50	5.51	6.71	6.16	6.77
Dry Beans $ per cwt.	8.40	8.00	6.30	9.70	11.50	9.70	27.30	14.80	29.30	18.69	16.51	16.88	16.48
Potatoes $ per cwt.	1.97	2.22	2.71	2.72	2.47	3.66	6.13	4.15	6.03	5.23	5.76	4.64	4.82
All Hay baled $ per ton	22.00	22.50	22.00	22.50	28.50	29.50	31.00	39.00	43.50	46.68	52.67	54.42	40.83
	Calendar Year Averages												
Hogs $ per cwt.	19.40	19.00	22.40	22.90	17.90	25.50	39.50	35.80	49.04	44.10	40.80	47.87	42.83
Beef Cattle $ per cwt.	20.20	20.70	24.20	25.80	26.40	30.50	40.20	34.60	33.37	33.28	33.06	45.57	60.29
Veal Calves $ per cwt	27.60	28.30	32.00	37.60	40.30	49.70	62.40	46.50	30.20	34.68	38.92	62.61	94.12
Lambs $ per cwt.	22.30	24.40	27.20	27.20	26.60	29.50	36.60	38.70	42.82	46.89	51.78	62.30	66.49
All Milk wholesale $ per cwt.	5.28	5.51	5.58	5.81	5.96	6.17	7.18	8.20	8.57	9.85	9.66	10.49	12.08
Turkeys cents per lb.	21.30	20.00	21.80	23.70	23.90	22.70	36.00	28.80	30.10	30.40	34.60	46.40	46.10
Eggs cents per doz.	28.70	33.30	37.20	36.10	27.00	26.30	49.60	48.00	45.70	53.80	48.80	46.80	49.90
Wool $ per lb.	.38	.35	.37	.37	.25	.29	.63	.37	.25	.47	.64	.65	.68

Source: *Agricultural Prices*, U.S. Department of Agriculture, Crop Reporting Board. *Agriculture Across Michigan*, U.S. Department of Agriculture and Michigan Department of Agriculture.

TABLE C-32

Michigan Farm Income Components: 1965-1979

(Millions)

	Realized Gross Farm Income							
Year	Cash Receipts From Farm Marketings	Government Payments	Non-Money Income	Other Farm Income	Total	Farm Production Expenses	Net Changes in Farm Inventories	Net Farm Income
1965	$ 793.9	$53.3	$104.6	$ 9.1	$ 960.9	$ 683.7	$-33.9	$243.3
1966	876.9	62.2	104.8	9.3	1,053.2	728.6	-15.5	309.0
1967	850.2	56.0	108.6	10.2	1,025.0	768.7	-18.6	237.7
1968	849.1	65.3	110.0	10.3	1,034.7	789.9	1.0	245.8
1969	888.2	73.4	117.1	10.5	1,089.1	799.5	6.0	295.6
1970	910.1	65.7	114.8	10.2	1,100.8	847.8	20.9	273.9
1971	974.3	52.5	116.5	12.0	1,155.3	885.4	-27.9	242.0
1972	1,039.1	61.2	126.7	12.4	1,239.3	936.0	58.4	361.7
1973	1,500.1	38.9	151.1	15.2	1,705.3	1,112.6	-91.7	500.9
1974	1,651.8	10.4	172.7	18.4	1,853.5	1,355.9	64.2	561.7
1975	1,647.7	13.3	184.9	22.9	1,868.8	1,437.0	58.2	489.9
1976	1,723.9	7.3	199.7	25.1	1,955.9	1,554.6	-35.2	366.1
1977	1,823.7	21.2	246.1	28.6	2,119.6	1,662.0	14.6	472.2
1978[1]	2,126.8	N.A.	N.A.	N.A.	N.A.	1,836.0	N.A.	565.0
1979[1]	2,416.3	N.A.	N.A.	N.A.	N.A.	2,075.8	N.A.	633.0

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1. Estimate.

Source: U.S. Department of Agriculture, Economic Research Service.

TABLE C-33

Number of Farms, Average Size, and Land in Farms in Michigan: 1950-1980

Year	Number of Farms	Average Size (acres)	Land in Farms (acres)	Year	Number of Farms	Average Size (acres)	Land in Farms (acres)
1950	161,000	111	17,900,000	1965	98,000	144	14,100,000
1951	156,000	113	17,700,000	1966	95,000	146	13,900,000
1952	151,000	116	17,500,000	1967	92,000	148	13,600,000
1953	146,000	118	17,300,000	1968	89,000	149	13,300,000
1954	135,000	123	16,600,000	1969	86,000	150	12,900,000
1955	138,000	122	16,900,000	1970	84,000	151	12,700,000
1956	135,000	120	16,600,000	1971	82,000	152	12,500,000
1957	132,000	123	16,300,000	1972	81,000	152	12,300,000
1958	127,000	126	16,000,000	1973	78,000	154	12,000,000
1959	123,000	128	15,700,000	1974	76,000	154	11,700,000
1960	118,000	131	15,400,000	1975[1]	70,000	164	11,500,000
1961	114,000	132	15,100,000	1976	69,000	165	11,400,000
1962	110,000	135	14,800,000	1977	68,000	165	11,200,000
1963	106,000	138	14,600,000	1978	65,000	166	10,800,000
1964	102,000	141	14,400,000	1979	63,000	168	10,600,000
				1980	63,000	167	10,500,000

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1. Revised definition of farm for 1975 and following years.

Source: Michigan Department of Agriculture, based on U.S. Census of Agriculture.

TABLE C-34

Estimates of the Population of Michigan by County, July 1, 1977, and July 1, 1978

(State estimates are shown to the nearest thousand, county estimates to the nearest hundred.)

County	July 1, 1978 (provisional)	July 1, 1977	April 1, 1970 (Census)	Change, 1970 to 1978		Components of Change, 1970 to 1978		
				Number	Percent	Births	Deaths	Net Migration
Michigan	9,189,000	9,148,000	8,881,826	307,000	3.5	1,190,000	630,000	-253,000
Alcona	9,300	9,100	7,113	2,100	30.1	800	900	2,200
Alger	10,000	9,800	8,568	1,500	17.0	1,100	900	1,200
Allegan	74,000	73,500	66,575	7,400	11.1	10,000	5,000	2,400
Alpena	33,400	33,300	30,708	2,700	8.7	4,000	2,200	900
Antrim	16,300	16,000	12,612	3,700	29.3	1,800	1,400	3,300
Arenac	13,500	13,600	11,149	2,400	21.2	1,700	1,200	1,800
Baraga	8,600	8,400	7,789	800	10.2	1,100	800	600
Barry	42,900	42,300	38,166	4,700	12.3	5,200	3,000	2,500
Bay	121,600	120,800	117,339	4,200	3.6	15,900	8,100	-3,600
Benzie	10,600	10,600	8,593	2,000	23.1	1,100	1,000	1,900
Berrien	167,300	170,100	163,940	3,300	2.0	24,500	12,700	-8,400
Branch	38,900	38,100	37,906	1,000	2.6	4,900	3,100	-800
Calhoun	140,700	140,300	141,963	-1,200	-0.9	18,800	10,900	-9,100
Cass	45,400	45,600	43,312	2,000	4.7	5,900	3,300	-500
Charlevoix	19,400	19,600	16,541	2,800	17.1	2,300	1,600	2,100
Cheboygan	19,800	20,100	16,573	3,200	19.6	2,500	1,600	2,400
Chippewa	30,500	36,200	32,412	-1,900	-5.9	5,700	2,500	-5,100
Clare	23,800	22,900	16,695	7,100	42.8	2,300	1,900	6,700
Clinton	55,000	53,900	48,492	6,500	13.4	6,600	2,700	2,500
Crawford	9,100	9,100	6,482	2,600	40.5	1,000	700	2,300
Delta	40,300	40,000	35,924	4,400	12.2	4,900	3,400	2,800
Dickinson	26,100	25,400	23,753	2,300	9.9	2,700	2,600	2,300
Eaton	82,100	79,300	68,892	13,200	19.1	9,200	4,200	8,200
Emmet	21,500	21,500	18,331	3,100	17.1	2,600	1,700	2,300
Genesee	451,000	448,600	445,589	5,400	1.2	64,600	26,900	-32,300
Gladwin	18,300	17,700	13,471	4,900	36.0	1,900	1,400	4,400
Gogebic	19,600	20,200	20,676	-1,100	-5.2	2,100	2,600	-600
Grand Traverse	48,400	47,400	39,175	9,300	23.6	5,900	3,200	6,500
Gratiot	39,300	39,700	39,246	100	0.2	5,600	2,900	-2,600
Hillsdale	41,200	40,600	37,171	4,000	10.8	5,100	3,000	2,000

TABLE C-34 (Continued)

Estimates of the Population of Michigan by County, July 1, 1977, and July 1, 1978

(State estimates are shown to the nearest thousand, county estimates to the nearest hundred.)

County	July 1, 1978 (provisional)	July 1, 1977	April 1, 1970 (Census)	Change, 1970 to 1978		Components of Change, 1970 to 1978		
				Number	Percent	Births	Deaths	Net Migration
Houghton	37,300	37,400	34,652	2,600	7.6	4,200	3,900	2,400
Huron	35,800	35,900	34,083	1,800	5.2	4,600	3,400	600
Ingham	271,000	269,200	261,039	9,900	3.8	36,600	13,700	-12,900
Ionia	49,700	49,100	45,848	3,800	8.3	6,900	3,400	400
Iosco	30,500	30,000	24,905	5,600	22.4	4,500	2,100	3,200
Iron	14,700	14,600	13,813	900	6.5	1,200	1,800	1,500
Isabella	52,100	51,100	44,594	7,500	16.8	5,900	2,500	4,100
Jackson	150,200	148,700	143,274	6,900	4.8	18,700	10,600	-1,200
Kalamazoo	208,000	205,000	201,550	6,500	3.2	24,900	11,500	-6,900
Kalkaska	11,400	11,000	5,372	6,100	112.7	1,100	700	5,700
Kent	435,800	431,400	411,044	24,700	6.0	57,000	28,500	-3,700
Keweenaw	2,200	2,400	2,264	*	-1.9	200	300	*
Lake	7,000	7,100	5,661	1,300	23.1	800	900	1,400
Lapeer	67,100	64,600	52,361	14,800	28.2	8,400	3,700	10,000
Leelanau	13,400	13,000	10,872	2,500	23.2	1,300	1,000	2,300
Lenawee	87,300	86,300	81,951	5,300	6.5	12,100	6,000	-700
Livingston	92,300	86,400	58,967	33,300	56.5	9,000	4,000	28,400
Luce	7,300	7,300	6,789	600	8.2	900	600	300
Mackinac	11,200	10,800	9,660	1,500	16.0	1,200	900	1,300
Macomb	693,400	685,100	626,204	67,200	10.7	79,800	32,200	19,700
Manistee	22,500	21,900	20,393	2,100	10.4	2,400	2,200	1,900
Marquette	73,800	73,100	64,686	9,100	14.0	10,200	4,500	3,300
Mason	24,700	25,200	22,612	2,100	9.4	2,800	2,200	1,500
Mecosta	34,800	34,800	27,992	6,800	24.2	3,900	2,000	4,900
Menominee	26,500	26,200	24,587	1,900	7.7	2,800	2,400	1,500
Midland	69,700	69,300	63,769	5,900	9.3	9,200	3,200	*
Missaukee	9,700	9,400	7,126	2,500	35.6	1,100	700	2,100
Monroe	131,800	129,800	119,215	12,600	10.6	16,700	7,400	3,300
Montcalm	45,400	45,100	39,660	5,700	14.4	6,200	3,600	3,100
Montmorency	7,700	7,300	5,247	2,500	47.3	700	700	2,400

TABLE C-34 (Continued)

Estimates of the Population of Michigan by County, July 1, 1977, and July 1, 1978

(State estimates are shown to the nearest thousand, county estimates to the nearest hundred.)

				Change, 1970 to 1978		Components of Change, 1970 to 1978		
County	July 1, 1978 (provisional)	July 1, 1977	April 1, 1970 (Census)	Number	Percent	Births	Deaths	Net Migration
Muskegon	158,800	158,800	157,426	1,400	0.9	21,200	11,300	-8,500
Newaygo	33,400	32,300	27,992	5,400	19.2	4,100	2,600	3,900
Oakland	1,009,400	988,700	907,871	101,600	11.2	112,300	53,200	42,500
Oceana	21,000	21,000	17,984	3,000	16.8	2,800	1,700	1,900
Ogemaw	16,800	15,300	11,903	4,900	40.9	1,700	1,500	4,700
Ontonagon	10,700	11,000	10,548	100	1.3	1,400	1,000	-200
Osceola	18,200	18,200	14,838	3,400	22.7	2,400	1,500	2,500
Oscoda	6,700	6,400	4,726	1,900	40.8	600	600	2,000
Otsego	14,300	14,300	10,422	3,900	37.6	1,700	800	3,000
Ottawa	149,400	146,200	128,181	21,200	16.5	18,600	7,500	10,100
Presque Isle	14,100	14,100	12,836	1,200	9.6	1,700	1,100	700
Roscommon	16,200	15,800	9,892	6,300	63.7	1,300	1,500	6,500
Saginaw	227,700	227,400	219,743	7,900	3.6	32,500	14,800	-9,800
St. Clair	133,500	132,000	119,280	14,200	11.9	17,200	10,200	7,300
St. Joseph	51,800	51,400	47,392	4,400	9.3	7,200	4,100	1,300
Sanilac	40,200	39,400	35,161	5,000	14.3	5,000	3,400	3,500
Schoolcraft	9,300	9,000	8,226	1,000	12.6	1,100	900	900
Shiawassee	70,300	69,600	63,075	7.200	11.4	9,600	4,400	2,000
Tuscola	55,100	54,600	48,603	6,500	13.4	7,200	3,800	3,100
Van Buren	62,300	62,300	56,173	6,100	10.8	8,400	5,000	2,600
Washtenaw	254,500	251,200	234,103	20,400	8.7	31,000	10,800	100
Wayne	2,390,600	2,425,100	2,670,368	-279,700	-10.5	341,000	208,000	-412,800
Wexford	22,800	22,400	19,717	3,100	15.5	3,000	1,900	2,000

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* Less than 50 persons or less than 0.05 percent.

Births and Deaths are based on reported vital statistics from April 1, 1970 to December 31, 1977, with extrapolations to June 30, 1978. Net migration is the difference between net change and natural increase.

Source: *Current Population Reports*, series P-26, No. 78-22, U.S. Department of Commerce, Bureau of the Census and special release by Michigan Department of Management and Budget.

TABLE C-35

Michigan and U.S. Resident Population, July 1, 1950 - July 1, 1979

(Thousands)

Year	Michigan Population	U.S. Population	Michigan as a percent of U.S.
1950	6,407	151,868	4.22
1951	6,497	153,982	4.22
1952	6,650	156,393	4.25
1953	6,822	158,956	4.29
1954	7,066	161,884	4.36
1955	7,285	165,069	4.41
1956	7,465	168,088	4.44
1957	7,569	171,187	4.42
1958	7,667	174,149	4.40
1959	7,767	177,135	4.38
1960	7,834	179,975	4.35
1961	7,893	182,973	4.32
1962	7,933	185,738	4.27
1963	8,058	188,438	4.28
1964	8,187	191,095	4.28
1965	8,357	193,460	4.32
1966	8,512	195,501	4.35
1967	8,630	197,374	4.37
1968	8,696	199,312	4.36
1969	8,781	201,306	4.36
1970	8,901	203,805	4.37
1971	8,965	206,219	4.35
1972	9,015	208,234	4.33
1973	9,060	209,859	4.32
1974	9,096	211,389	4.30
1975	9,092	213,051	4.27
1976	9,100	214,680	4.24
1977	9,138	216,400	4.22
1978	9,181	218,228	4.21
1979	9,207	220,099	4.18

Sources: *Current Population Reports*, Series P-25, Nos. 304, 376, 380, 460, 468, Department of Commerce, Bureau of the Census. The figures for 1971 through 1979 currently revised released by U.S. Department of Commerce, Bureau of the Census.

TABLE C-36

Estimates of the U.S. Population by Region and State: July 1, 1978 and 1979

(Thousands)

Region, Division, and State	Resident population[1]					Civilian population				
				Change, 1970-79					Change, 1970-79	
	July 1, 1979 (provisional)	July 1, 1978	April 1, 1970 (census)	Number	Percent	July 1, 1979 (provisional)	July 1, 1978	April 1, 1970[2]	Number	Percent
United States, total	220,099	218,228	203,302	16,797	8.3	218,497	216,600	201,131	17,367	8.6
Regions:										
Northeast	49,004	49,092	49,061	-56	-0.1	48,896	48,986	48,857	39	0.1
North Central	58,408	58,257	56,590	1,818	3.2	58,265	58,109	56,379	1,885	3.3
South	71,543	70,644	62,813	8,730	13.9	70,708	69,799	61,736	8,972	14.5
West	41,143	40,235	34,838	6,305	18.1	40,629	39,706	34,159	6,470	18.9
Northeast:										
New England	12,291	12,267	11,847	444	3.7	12,244	12,221	11,750	494	4.2
Middle Atlantic	36,713	36,825	37,213	-500	-1.3	36,652	36,764	37,107	-455	-1.2
North Central:										
East North Central	41,289	41,220	40,263	1,026	2.5	41,223	41,152	40,162	1,061	2.6
West North Central	17,119	17,036	16,328	792	4.8	17,042	16,957	16,217	824	5.1
South:										
South Atlantic	34,977	34,648	30,679	4,298	14.0	34,452	34,118	29,995	4,457	14.9
East South Central	14,082	13,951	12,808	1,274	10.0	13,983	13,851	12,678	1,305	10.3
West South Central	22,483	22,046	19,326	3,157	16.3	22,273	21,830	19,063	3,211	16.8
West:										
Mountain	10,673	10,364	8,290	2,384	28.8	10,560	10,246	8,167	2,393	29.3
Pacific	30,470	29,871	26,548	3,922	14.8	30,069	29,460	25,992	4,077	15.7
New England:										
Maine	1,097	1,092	994	103	10.4	1,087	1,081	982	105	10.7
New Hampshire	887	869	738	149	20.2	883	865	734	149	20.3
Vermont	493	487	445	49	10.9	493	487	445	49	10.9
Massachusetts	5,769	5,771	5,689	80	1.4	5,756	5,758	5,658	97	1.7
Rhode Island	929	932	950	-20	-2.1	924	928	915	9	1.0
Connecticut	3,115	3,116	3,032	83	2.7	3,101	3,101	3,016	85	2.8

TABLE C-36 (Continued)

Estimates of the U.S. Population by Region and State: July 1, 1978 and 1979

(Thousands)

Region, Division, and State	Resident population[1]					Civilian population				
				Change, 1970-79					Change, 1970-79	
	July 1, 1979 (provisional)	July 1, 1978	April 1, 1970 (census)	Number	Percent	July 1, 1979 (provisional)	July 1, 1978	April 1, 1970[2]	Number	Percent
Middle Atlantic:										
New York	17,649	17,746	18,241	-592	-3.2	17,624	17,720	18,210	-586	-3.2
New Jersey	7,332	7,315	7,171	161	2.2	7,306	7,291	7,112	194	2.7
Pennsylvania	11,731	11,763	11,801	-70	-0.6	11,722	11,753	11,785	-63	-0.5
East North Central:										
Ohio	10,731	10,732	10,657	74	0.7	10,719	10,720	10,638	81	0.8
Indiana	5,400	5,386	5,195	205	3.9	5,395	5,381	5,187	207	4.0
Illinois	11,230	11,238	11,110	119	1.1	11,193	11,201	11,055	139	1.3
Michigan	9,208	9,181	8,882	326	3.7	9,197	9,170	8,866	331	3.7
Wisconsin	4,720	4,683	4,418	302	6.8	4,719	4,681	4,416	303	6.9
West North Central:										
Minnesota	4,060	4,024	3,806	254	6.7	4,058	4,021	3,801	256	6.7
Iowa	2,903	2,906	2,825	77	2.7	2,902	2,905	2,825	77	2.7
Missouri	4,868	4,847	4,678	190	4.1	4,848	4,827	4,639	209	4.5
North Dakota	657	653	618	39	6.3	646	641	606	40	6.6
South Dakota	689	690	666	23	3.4	683	684	661	22	3.3
Nebraska	1,574	1,569	1,485	89	6.0	1,562	1,557	1,473	89	6.0
Kansas	2,369	2,347	2,249	120	5.3	2,344	2,322	2,212	131	5.9
South Atlantic:										
Delaware	582	584	548	34	6.2	577	578	542	35	6.5
Maryland	4,149	4,148	3,924	225	5.7	4,107	4,105	3,850	256	6.7
District of Columbia	656	671	757	-101	-13.4	648	663	746	-98	-13.1
Virginia	5,197	5,177	4,651	545	11.7	5,046	5,023	4,458	588	13.2
West Virginia	1,878	1,861	1,744	134	7.7	1,877	1,860	1,744	133	7.7
North Carolina	5,606	5,571	5,084	522	10.3	5,511	5,472	4,960	551	11.1
South Carolina	2,932	2,902	2,591	342	13.2	2,866	2,836	2,513	353	14.0
Georgia	5,118	5,075	4,588	530	11.5	5,055	5,015	4,497	558	12.4
Florida	8,860	8,661	6,791	2,069	30.5	8,765	8,565	6,685	2,080	31.1

TABLE C-36 (Continued)

Estimates of the U.S. Population by Region and State: July 1, 1978 and 1979

(Thousands)

Region, Division, and State	Resident population[1] July 1, 1979 (provisional)	Resident population[1] July 1, 1978	Resident population[1] April 1, 1970 (census)	Resident population[1] Change, 1970-79 Number	Resident population[1] Change, 1970-79 Percent	Civilian population July 1, 1979 (provisional)	Civilian population July 1, 1978	Civilian population April 1, 1970[2]	Civilian population Change, 1970-79 Number	Civilian population Change, 1970-79 Percent
East South Central:										
Kentucky	3,527	3,490	3,221	306	9.5	3,492	3,455	3,172	320	10.1
Tennessee	4,380	4,333	3,926	454	11.6	4,359	4,311	3,900	459	11.8
Alabama	3,769	3,728	3,444	325	9.4	3,746	3,705	3,410	336	9.8
Mississippi	2,406	2,400	2,217	189	8.5	2,386	2,379	2,196	190	8.7
West South Central:										
Arkansas	2,180	2,167	1,923	257	13.4	2,170	2,157	1,915	256	13.4
Louisiana	4,026	3,986	3,645	382	10.5	3,995	3,954	3,603	393	10.9
Oklahoma	2,892	2,842	2,559	332	13.0	2,862	2,814	2,522	340	13.5
Texas	13,385	13,050	11,199	2,186	19.5	13,246	12,905	11,024	2,222	20.2
Mountain:										
Montana	786	780	694	92	13.2	781	775	688	93	13.4
Idaho	905	882	713	192	26.9	899	876	708	191	26.9
Wyoming	450	425	332	117	35.3	446	421	329	117	35.6
Colorado	2,772	2,706	2,210	563	25.5	2,731	2,662	2,159	572	26.5
New Mexico	1,241	1,215	1,017	224	22.1	1,225	1,198	1,000	226	22.6
Arizona	2,450	2,373	1,775	675	38.0	2,424	2,346	1,747	677	38.7
Utah	1,367	1,316	1,059	308	29.0	1,361	1,311	1,056	306	29.0
Nevada	702	666	489	213	43.6	693	657	479	213	44.5
Pacific:										
Washington	3,926	3,793	3,413	513	15.0	3,876	3,741	3,342	534	16.0
Oregon	2,527	2,452	2,092	436	20.8	2,524	2,448	2,088	436	20.9
California	22,696	22,314	19,971	2,725	13.6	22,428	22,040	19,577	2,852	14.6
Alaska	406	411	303	104	34.3	383	387	270	113	41.7
Hawaii	915	902	770	145	18.8	857	844	715	142	19.9

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1. Resident Population includes estimated Armed Forces personnel residing in each state.
2. Includes officially recognized changes to census counts through September, 1979. The official 1970 census counts used in apportionment are shown in 1970 *Census of Population,* Volume 1, Characteristics of the Population, Part A, *Number of Inhabitants,* p. VIII, U.S. Department of Commerce, Bureau of the Census.

Source: *Current Population Reports,* Series P-25, No. 868, U.S. Department of Commerce, Bureau of the Census, November 1979.

TABLE C-37

Michigan: School Enrollment Grades K-12: 1973-1984[1]

Year		Kinder-garten	Change From Last Period	Grades 1-6	Change From Last Period	Grades 7-9	Change From Last Period	Grades 10-12	Change From Last Period	Grades K-12	Change From Last Period
1973-74	Public	153,834	-5,310	944,929	-29,146	516,036	-2,485	473,912	2,145	2,088,701	-34,796
	Non-Public	5,842	677	114,744	-4,047	55,080	-699	38,609	-247	214,275	-4,316
	TOTAL	159,666	-4,633	1,059,673	-33,193	571,116	-3,184	512,521	1,898	2,302,976	-39,112
1974-75	Public	155,987	2,163	914,108	-30,821	512,494	-3,542	473,860	-52	2,056,449	-32,252
	Non-Public	6,871	1,029	109,379	-5,365	54,662	-418	38,654	45	209,566	-4,709
	TOTAL	162,858	3,192	1,023,487	-36,186	567,156	-3,960	512,514	-7	2,266,015	-36,961
1975-76	Public	159,981	3,994	884,786	-29,322	506,107	-6,387	475,334	1,474	2,026,208	-30,241
	Non-Public	8,825	1,934	107,936	-1,443	53,161	-1,481	38,750	96	208,692	-874
	TOTAL	168,806	5,948	992,722	-30,765	559,288	-7,868	514,084	1,570	2,234,900	-31,115
1976-77	Public	152,790	-7,191	866,756	-18,030	496,190	-9,917	473,452	-1,882	1,989,188	-37,020
	Non-Public	9,937	1,112	109,287	1,351	52,943	-238	38,686	-64	210,853	2,161
	TOTAL	162,727	-6,079	976,043	-16,679	549,133	-10,155	512,138	-1,946	2,200,041	-34,859
1977-78	Public	136,843	-15,947	852,650	-14,106	479,150	-17,040	460,862	-12,590	1,929,505	-59,683
	Non-Public	9,882	-55	108,107	-1,180	51,896	-1,047	38,795	109	208,680	-2,173
	TOTAL	146,725	-16,002	960,757	-15,286	531,046	-18,087	499,657	-12,481	2,138,185	-61,856
1978-79	Public	129,592	-7,251	832,229	-20,421	457,555	-21,595	450,435	-10,427	1,869,811	-59,694
	Non-Public	10,166	284	105,507	-2,600	49,558	-2,338	38,249	-546	203,480	-5,200
	TOTAL	139,758	-6,967	937,736	-23,021	507,113	-23,933	488,684	-10,973	2,073,291	-64,894
1979-80[2]	Public	125,710	-3,890	809,770	-22,460	436,790	-20,770	437,690	-12,740	1,809,950	-59,860
	Non-Public	9,960	-200	104,200	-1,310	47,900	-1,660	37,820	-430	199,880	-3,600
	TOTAL	135,670	-4,090	913,570	-24,170	484,690	-22,430	475,510	-13,170	2,009,830	-63,460
1980-81[2]	Public	122,520	-3,190	788,120	-21,650	421,290	-15,490	421,890	-15,800	1,753,820	-56,130
	Non-Public	9,710	-250	103,330	-870	46,550	-1,353	36,730	-1,090	196,320	-3,560
	TOTAL	132,230	-3,440	891,450	-22,120	467,840	-16,845	458,620	-16,890	1,950,140	-59,690
1981-82[2]	Public	120,190	-2,340	762,510	-25,610	414,220	-7,070	403,480	-18,410	1,700,390	-53,430
	Non-Public	9,530	-190	101,700	-1,640	45,780	-760	35,630	-1,100	192,630	-3,690
	TOTAL	129,720	-2,530	864,210	-27,250	460,000	-7,830	439,110	-19,510	1,893,030	-57,120
1982-83[2]	Public	126,620	6,440	729,360	-33,140	417,160	2,940	385,650	-17,830	1,658,800	-41,600
	Non-Public	10,040	510	98,730	-2,970	46,550	760	34,350	-1,280	189,660	-2,970
	TOTAL	136,660	6,950	828,090	-36,110	463,710	3,700	420,000	-19,110	1,848,460	-44,570
1983-84[2]	Public	127,090	470	707,360	-22,010	419,870	2,710	372,290	-13,370	1,626,600	-32,200
	Non-Public	10,070	40	96,890	-1,830	47,380	830	33,420	-930	187,770	-1,890
	TOTAL	137,160	510	804,250	-23,840	467,250	3,540	405,710	-14,300	1,814,370	-33,990

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1. Excludes special education and part-time students.
2. Projected enrollments are derived from Stanley E. Hecker and Frederick R. Ignatovich, *Michigan Total, Public, and Non-public Membership Projections*, Michigan State University, Department of Administration and Higher Education, (August 23, 1979).

Source: Michigan Department of Education.

TABLE C-38

Assessed Value of Tangible Property, Tangible Property Tax Levies, and Average Tax Rate in Michigan: 1952-1979

(Thousands)

				Tax Levy		Average Tax Rate	
Year	Assessed Valuation	County Equalized Valuations	State Equalized Valuations	Amount	Percent Change from Previous Year	Amount	Percent Change from Previous Year
1952	$11,531,377	$12,293,598	$13,634,300	$ 409,289	9.1	$30.02	-7.9
1953	12,094,392	13,059,429	15,720,900	443,292	8.3	28.20	-6.1
1954	12,782,605	13,910,137	16,722,075	496,501	12.2	29.69	5.3
1955	13,481,826	15,505,027	17,551,275	563,871	13.5	32.13	8.2
1956	14,530,579	17,044,209	18,957,624	621,839	10.3	32.80	2.1
1957	15,452,973	18,511,832	21,602,319	710,464	14.1	32,89	.3
1958	15,926,183	19,501,399	22,153,627	741,260	4.4	33.46	1.7
1959	16,126,254	19,883,366	22,438,384	786,649	6.2	35.06	4.8
1960	16,629,847	20,811,250	24,870,342	851,180	8.1	34.22	-2.4
1961	16,784,842	22,422,661	25,202,552	874,775	2.8	34.71	1.4
1962	16,984,435	22,802,732	25,182,559	891,307	1.8	35.39	2.0
1963	17,190,129	23,211,055	25,797,485	934,869	4.9	36.24	2.4
1964	17,694,863	24,053,734	26,350,184	991,234	6.0	37.62	3.8
1965	18,370,770	24,743,771	27,080,518	1,038,623	4.8	38.35	1.9
1966	20,483,070	27,905,044	28,206,349	1,129,224	8.7	40.03	4.4
1967	24,260,128	29,807,504	29,891,295	1,288,682	14.1	43.11	7.7
1968	27,702,241	32,012,879	32,041,173	1,474,994	14.5	46.03	6.8
1969	30,079,712	35,083,860	35,101,273	1,660,861	12.6	47.32	2.8
1970	32,954,101	38,553,759	38,551,597	1,874,291	12.9	48.62	2.7
1971	36,593,349	41,562,933	41,648,959	2,063,280	10.1	49.54	1.9
1972	39,814,568	44,347,772	44,487,728	2,183,224	5.8	49,07	-.9
1973	42,648,458	47,492,752	47,612,674	2,420,403	10.9	50.84	3.6
1974	47,269,245	51,747,552	51,871,329	2,649,594	9.5	51.08	.5
1975	51,148,731	55,802,269	56,800,875	2,903,906	9.6	51.12	.1
1976	49,905,386	54,232,820	55,478,935	2,960,724	2.0	53.37	4.4
1977	53,867,947	59,305,512	59,512,999	3,207,096	8.3	53.89	.9
1978	58,353,692	64,724,020	64,863,929	3,484,874	8.7	53.73	-.3
1979	64,169,123[1]	72,449,469[1]	72,527,956[1]	3,890,000[2]	11.6	53.63[2]	-.2

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1. Estimated May 29, 1979.
2. Estimated by State Tax Commission.

Source: Michigan Department of Treasury, State Tax Commission.

TABLE C-39

Michigan Valuation[1] by Class for Real and Personal Property: 1965-1979

Real

Year	Agriculture	Commercial	Industrial	Residential	Timber-Cut Over	Total
1965	$1,782,337,865	$3,207,827,756	$3,366,832,027	$12,345,526,028	$ 120,899,000	$20,823,422,676
1966	1,865,411,212	3,285,671,581	3,512,792,357	12,855,036,112	121,503,073	21,640,414,335
1967	1,948,819,877	3,387,509,107	3,579,844,740	13,768,088,054	121,466,492	22,805,728,270
1968	2,034,092,841	3,592,710,960	3,810,973,211	14,969,692,928	131,887,565	24,539,357,505
1969	2,259,750,633	3,895,805,295	4,026,509,087	16,769,575,874	142,832,730	27,094,473,619
1970	2,430,122,929	4,482,891,393	4,357,805,773	18,425,815,010	152,210,761	29,848,845,866
1971	2,631,643,039	4,920,726,264	4,732,051,343	20,121,981,797	166,389,114	32,572,791,557
1972	2,767,998,546	5,289,180,485	5,006,268,660	21,837,363,296	198,391,053	35,099,202,040
1973	2,966,596,460	6,095,838,694	5,257,318,114	23,132,331,200	230,441,780	37,682,526,248
1974	3,253,519,145	6,748,511,652	5,614,001,496	25,185,954,680	259,918,052	41,061,905,025
1975	3,680,674,772	7,251,964,454	5,824,753,617	27,679,961,125	289,724,453	44,727,078,421
1976	3,931,334,132	7,643,557,366	6,356,640,800	29,652,286,598	339,314,392	47,923,133,288
1977	4,410,266,132	8,077,760,508	6,585,112,846	32,150,563,868	381,970,088	51,605,673,442
1978	5,050,142,536	8,650,737,622	6,935,567,107	35,256,657,107	422,603,165	56,315,708,253
1979	5,766,430,668	9,581,045,520	7,502,276,607	39,954,252,345	466,549,835	63,270,554,975

Personal

Year	Agriculture	Commercial	Industrial	Residential	Utility	Total
1965	$ 150,601,178	$1,279,989,787	$3,617,980,758	$ 28,343,190	$1,160,632,480	$ 6,237,547,393
1966	147,296,543	1,345,365,329	3,842,520,992	29,007,598	1,201,783,294	6,565,973,756
1967	1,018,373	1,490,963,980	4,262,523,175	27,726,088	1,299,049,485	7,081,281,101
1968	298,192	1,645,679,027	4,439,767,958	27,961,824	1,427,807,619	7,541,514,620
1969	134,764	1,786,309,802	4,670,662,761	37,587,110	1,612,062,552	8,106,756,989
1970	74,842	1,962,491,600	5,009,824,294	26,318,343	1,758,839,874	8,757,548,953
1971	94,686	2,060,693,881	5,128,931,506	27,807,650	1,847,296,876	9,064,824,599
1972	80,064	2,134,366,046	5,227,795,300	28,592,264	1,979,750,787	9,370,584,461
1973	128,156	2,328,516,373	5,417,026,545	32,384,384	2,143,642,638	9,921,698,096
1974	207,163	2,591,166,371	5,812,222,781	36,173,370	2,379,939,037	10,819,708,722
1975	204,494	2,844,516,638	6,551,055,713	39,285,910	2,652,494,463	12,087,557,218
1976	199,605	1,524,568,091	3,568,938,839	42,203,838	2,402,751,114	7,538,661,487
1977	261,790	1,621,573,625	3,702,836,647	44,002,603	2,528,988,905	7,897,663,570
1978	255,864	1,781,876,984	4,029,145,367	52,710,272	2,690,893,405	8,554,881,892
1979	279,328	1,971,939,226	4,304,285,432	54,087,484	2,926,809,276	9,257,400,746

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[1] Figures through 1970 represent 50 percent of true cash value. Figures from 1971 on represent state equalized value.

Source: Michigan Department of Treasury, State Tax Commission.

TABLE C-40

General Property Taxes by Local Unit of Government in Michigan: 1958-1978

			Local Units' Share of Property Tax									
	School		City		County		Township		Village		Total	
Year	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
1958	353,802.2	47.7	234,384.0	31.6	135,025.9	18.2	10,124.2	1.4	7,960.0	1.1	741,260.3	100.0
1959	389,000.3	49.5	242,136.3	30.8	137,105.3	17.4	11,002.3	1.4	7,405.2	.9	786,649.4	100.0
1960	434,146.0	51.0	250,634.4	29.4	146,079.6	17.2	12,840.1	1.5	7,479.5	.9	851,179.6	100.0
1961	451,447.4	51.6	253,717.6	29.0	148,592.5	17.0	13,910.8	1.6	7,107.0	.8	874,775.3	100.0
1962	465,724.7	52.3	254,522.7	28.6	149,178.6	16.7	14,697.9	1.6	7,183.0	.8	891,306.9	100.0
1963	498,052.4	53.3	260,411.0	27.8	153,274.8	16.4	15,773.4	1.7	7,357.4	.8	934,869.0	100.0
1964	534,370.4	53.9	265,713.7	26.8	166,548.3	16.8	16,978.0	1.7	7,623.8	.8	991,234.2	100.0
1965	571,091.1	55.0	269,558.3	26.0	172,293.6	16.6	19,024.5	1.8	6,655.5	.6	1,038,623.0	100.0
1966	636,209.7	56.3	282,974.0	25.1	181,355.7	16.1	21,743.5	1.9	6,941.4	.6	1,129,224.3	100.0
1967	750,348.5	58.2	314,664.2	24.4	189,037.4	14.7	26,793.6	2.1	7,838.3	.6	1,288,682.0	100.0
1968	898,866.9	60.9	339,445.3	23.0	199,504.7	13.5	28,703.2	2.0	8,474.1	.6	1,474,994.2	100.0
1969	1,032,700.1	62.2	368,264.1	22.2	216,840.8	13.1	33,868.7	2.0	9,187.6	.5	1,660,861.3	100.0
1970	1,167,313.3	62.3	417,562.7	22.3	240,246.9	12.8	38,954.4	2.1	10,214.2	.5	1,874,291.5	100.0
1971	1,293,298.2	62.7	455,499.5	22.1	259,503.5	12.6	43,820.7	2.1	11,158.2	.5	2,063,280.1	100.0
1972	1,367,523.3	62.6	478,665.4	21.9	276,349.4	12.7	47,966.9	2.2	12,719.4	.6	2,183,224.4	100.0
1973	1,543,161.8	63.8	515,281.2	21.3	294,461.2	12.1	53,656.6	2.2	13,841.8	.6	2,420,402.6	100.0
1974	1,725,399.0	65.1	525,884.2	19.8	319,716.8	12.1	62,529.7	2.4	16,064.2	.6	2,649,593.8	100.0
1975	1,899,787.4	65.4	564,565.6	19.4	347,099.5	12.0	74,693.5	2.6	17,759.6	.6	2,903,905.6	100.0
1976	1,951,535.5	65.9	571,117.9	19.3	341.809.9	11.5	78,555.2	2.7	17,705.1	.6	2,960,723.6	100.0
1977	2,141,067.6	66.8	586,803.2	18.3	369,748.3	11.5	90,448.4	2.8	19,028.3	.6	3,207,095.8	100.0
1978	2,342,118.9	67.2	620,979.0	17.8	400,217.0	11.5	100,893.4	2.9	20,665.5	.6	3,484,873.8	100.0

Source: Michigan Department of Treasury, State Tax Commission.

TABLE C-41

School Property Taxes in Michigan: 1958-1978

(Dollar Amounts in Thousands)

	Operating				Debt and Building and Site			Total School Taxes		
Year	Percent of Total Property Taxes	Amount	Percent of Total School Taxes	Millage Rate	Amount	Percent of Total School Taxes	Millage Rate	Amount	Percent of Total School Taxes	Millage Rate
1958	35.5	$263,285.6	74.4	11.88	$90,516.6	25.6	4.09	$353,802.2	100.0	15.97
1959	36.1	283,735.4	72.9	12.65	105,264.9	27.1	4.69	389,000.3	100.0	17.34
1960	37.9	322.184.3	74.2	12.96	111,961.7	25.8	4.50	434,146.0	100.0	17.46
1961	39.2	342,556.0	75.9	13.59	108,891.4	24.1	4.32	451,447.4	100.0	17.91
1962	40.8	363,570.0	78.1	14.44	102,154.7	21.9	4.05	465,724.7	100.0	18.49
1963	42.6	398,223.4	80.0	15.44	99,829.0	20.0	3.87	498,052.4	100.0	19.31
1964	43.8	433,945.3	81.2	16.47	100,425.1	18.8	3.81	534,370.4	100.0	20.28
1965	44.9	466,697.7	81.7	17.23	104,393.4	18.3	3.86	571,091.1	100.0	21.09
1966	46.4	524,235.6	82.4	18.59	111,974.1	17.6	3.97	636,209.7	100.0	22.56
1967[1]	48.8	629,330.8	83.9	21.05	121,017.7	16.1	4.05	750,348.5	100.0	25.10
1968	51.6	761,094.8	84.7	23.75	137,772.1	15.3	4.30	898,866.9	100.0	28,05
1969	52.2	868,152.4	84.1	24.73	164,547.7	15.9	4.69	1,032,700.1	100.0	29.42
1970	52.8	989,877.6	84.8	25.68	177,435.7	15.2	4.60	1,167,313.3	100.0	30.28
1971	53.3	1,101,358.7	85.2	26.44	191,939.5	14.8	4.61	1,293,298.2	100.0	31.05
1972	53.6	1,171,356.3	85.7	26.33	196,167.0	14.3	4.41	1,367,523.3	100.0	30.74
1973	54.4	1,317,419.4	85.4	27.67	225,742.4	14.6	4.74	1,543,161.8	100.0	32.41
1974	56.4	1,494,394.3	86.6	28.81	231,004.6	13.4	4.45	1,725,399.0	100.0	33.26
1975	57.3	1,663,951.6	87.6	29.30	235,835.8	12.4	4.15	1,899,787.4	100.0	33.45
1976	57.5	1,702,285.7	87.2	30.69	249,249.8	12.8	4.49	1,951,535.5	100.0	35.18
1977	66.8	1,891,472.6	88.3	31.78	249,595.0	11.7	4.20	2.141,067.6	100.0	35.98
1978	67.2	2,072,999.5	88.5	31.96	269,119.4	11.5	4.15	2,342,118.9	100.0	36.11

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[1] Estimated from expenditures prior to this year.

Source: Michigan Department of Treasury, State Tax Commission and Michigan Department of Education.

TABLE C-42

Students Enrolled in Public and Private Elementary, Secondary, and Higher Education in Michigan: 1965-1980

	Elementary[1]		Secondary[2]		Total K-12			Percent Change		
School Year	Public	Private	Public	Private	Public	Private	Public and Private	Public	Private	Public and Private
1964-65	1,134,309	228,293	783,542	140,902	1,917,851	369,195	2,287,046	3.3	2.9	1.0
1965-66	1,163,749	219,293	804,664	145,793	1,968,413	365,086	2,333,499	2.6	-1.1	2.0
1966-67	1,186,590	212,284	847,392	141,160	2,033,982	353,444	2,387,426	3.3	-3.2	2.3
1967-68	1,195,151	202,150	884,553	136,317	2,079,704	338,467	2,418,711	2.2	-4.2	1.3
1968-69	1,200,083	190,609	922,836	121,693	2,122,919	312,303	2,435,222	2.1	-7.7	0.7
1969-70	1,205,193	171,413	959,193	124,896	2,164,386	296,309	2,460,695	2.0	-5.2	1.0
1970-71	1,200,624	200,344	978,121	74,084	2,178,745	274,428	2,453,173	0.7	-7.4	-0.3
1971-72	1,201,522	127,043	1,010,983	96,793	2,212,505	223,836	2,436,341	1.5	-18.4	-0.7
1972-73	1,168,731	126,431	1,024,539	94,811	2,193,270	221,242	2,414,512	-0.9	-1.2	-0.9
1973-74	1,132,474	121,584	1,025,401	93,718	2,157,875	215,302	2,373,177	-1.6	-2.7	-1.7
1974-75	1,103,770	117,023	1,033,493	93,324	2,137,263	210,347	2,347,610	-1.0	-2.3	-1.1
1975-76	1,082,797	117,713	1,045,120	91,805	2,127,917	209,518	2,337,435	-.4	-.4	-.4
1976-77	1,019,546	160,445	1,062,390	54,653	2,081,936	215,098	2,297,034	-2.2	2.7	-1.7
1977-78	989,493	117,989	1,035,673	93,951	2,025,166	211,940	2,237,106	-2.7	-1.5	-2.6
1978-79	1,003,355	116,213	962,802	87,846	1,966,157	204,059	2,170,216	-2.9	-3.7	-3.0

	Public Higher Education				Private Higher Education			
School Year	Two-Year	Four-Year	Total	Percent Change	Total	Percent Change	Total Higher Education[3]	Percent Change
1964-65	46,123	143,114	189,237	13.2	43,472	7.0	232,709	12.0
1965-66	58,216	162,312	220,528	16.5	47,896	10.2	268,424	15.3
1966-67	69,496	176,487	245,983	11.5	49,462	3.3	295,445	10.1
1967-68	79,698	187,708	267,406	8.7	50,461	2.0	317,867	7.6
1968-69	95,965	198,419	294,384	10.1	50,777	0.6	345,161	8.6
1969-70	115,299	208,323	323,622	9.9	50,759	-0.04	374,381	8.5
1970-71	125,533	217,802	343,355	6.1	52,348	3.1	395,703	5.7
1971-72	132,059	220,165	352,224	2.6	52,928	1.1	405,152	2.3
1972-73	136,611	218,724	355,335	.9	50,593	-4.4	405,928	0.2
1973-74	152,715	221,893	374,608	5.4	51,160	1.1	425,768	4.9
1974-75	173,643	229,627	403,270	7.7	55,273	8.0	458,543	7.7
1975-76	197,199	240,442	437,641	8.5	61,081	10.5	498,722	8.8
1976-77	187,622	236,831	424,453	-3.0	60,372	-1.2	484,825	-2.8
1977-78	186,876	236,618	423,494	-.2	61,906	2.5	485,400	.1
1978-79	187,649	236,035	423,684	.05	62,810	1.5	486,494	.2
1979-80	209,554	240,600	450,154	6.25	64,333	2.4	514,487	5.75

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1. Includes grades K-6 and special education students.
2. Includes grades 7-12 and part-time students.
3. Headcount Basis.

Source: Michigan Department of Education and Michigan Department of Management and Budget.